Application No.: 10/570,159 Art Unit 1654 Reply to Restriction Requirement Docket No.: 0152-0725PUS1

4. (Original) The TGF-β gene expression inhibitor according to claim 3, wherein said target region is a double helix region which comprises a part or all of the following base sequence from -544 to -538 (SEQ ID NO: 3) in the hTGF-β1 promoter, and a complementary strand thereof,

TTCTTAC.

 (Carrently Amended) The TGF-β gone expression inhibitor according to claim 1, wherein said pyrrole-imidazole polyamide is represented by the following formula:
 (Formula 1)

wherein the terminal carboxyl group of said pyrrole-imidazole polyamide optionally forms an amide, wherein the amide is optionally bended to N. N-dimethylaminopropylamine, and

said pyrrole-imidazole polyamide is optionally conjugated to fluorescein-isothiocyanate.

 (Originat) The TGP-β gene expression inhibitor according to claim 5, wherein the terminal carboxyl group of said pyrrole-imidazole polyamide forms an amide.

3 of 7

GMM/ETP/las

Author Search

=> FILE HCAPLUS 'ENTERED AT 14:51:22 ON 06 JUL 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on SIN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 6 Jul 2009 VOL 151 ISS 2
FILE LAST UPDATED: 5 Jul 2009 (20090705/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

HCAplus now includes complete International Patent Classification (IPC)

reclassification data for the second quarter of 2009.

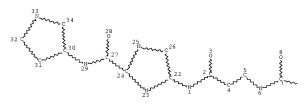
CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

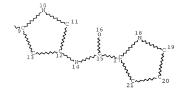
This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D STAT QUE L17 L7 STR



Page 1-A



```
Page 1-B
NODE ATTRIBUTES:
NSPEC
       IS C
                  AT
                       1
NSPEC
        IS C
                  AT
NSPEC
       IS C
                  AT
                       3
NSPEC
       IS C
                  AT
                       4
NSPEC
        IS C
                  AT
                       5
NSPEC
        IS C
                  AT
                       6
NSPEC
       IS C
                       7
                  AT
NSPEC
       IS C
                  AT
                       8
NSPEC
       IS R
                  AT
                      9
NSPEC
       IS R
                  AT 10
NSPEC
       IS R
                  AT
                     11
NSPEC
        IS R
                  AT
                      12
NSPEC
        IS R
                  AT
                     13
NSPEC
        IS C
                  AT
                     14
NSPEC
       IS C
                  AT
                     15
NSPEC
       IS C
                  AT
                     16
NSPEC
       IS R
                  AT
                     17
NSPEC
        IS R
                  AT
                     18
NSPEC
        IS R
                  AT
                      19
NSPEC
        IS R
                  AT
                     20
NSPEC
       IS R
                  AT
                     21
NSPEC
       IS R
                  AT
                     22
NSPEC
       IS R
                  AT 23
NSPEC
       IS R
                  AT 24
NSPEC
       IS R
                  AT
                     25
NSPEC
       IS R
                  AT
                     26
NSPEC
       IS C
                  ΑT
                     27
NSPEC
       IS C
                  AT
                     28
       IS C
                  AT 29
NSPEC
NSPEC
       IS R
                  AT 30
NSPEC
       IS R
                  ΑT
                     31
NSPEC
       IS R
                  AT
                     32
NSPEC
        IS R
                  ΑT
                     33
NSPEC
        IS R
                  AT
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT
                         2
                            3 4 5 6 7 8 14 15 16 27 28 29
                       1
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS $34\,$

STEREO ATTRIBUTES: NONE

L10 335 SEA FILE-REGISTRY SSS FUL L7

L12 22 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L10

13 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L12 AND (PRY<=2004 OR

AY<=2004 OR PD<=2004 OR PY<=2004) L14 1632 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON FUKUDA N?/AU

83 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON KISHIOKA H?/AU

L16 3217 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON SUGIYAMA H?/AU

1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L14 OR L15 OR L16)

AND L13

=> FILE WPIX

L17

FILE 'WPIX' ENTERED AT 14:51:41 ON 06 JUL 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE LAST UPDATED: 2 JUL 2009 <20090702/IIP>

MOST RECENT UPDATE: 200941 <200941/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> Now containing more than 1.4 million chemical structures in DCR <<<

>>> IPC, ECLA and US National Classifications have been updated

with reclassifications to March 15th, 2009.

F-Term and FI-Term original classifications are current and reclassification will commence in June.

No update date (UP) has been created for the reclassified

documents, but they can be identified by specific update codes (see HELP CLA for details) <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE. PLEASE VISIT:

http://www.stn-international.com/stn_guide.html

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://scientific.thomsonreuters.com/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0: http://www.stn-international.com/DWPIAnaVist2_0608.html

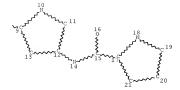
>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

'BI, ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> D STAT QUE L21 L7 STR

28 0 **2** 27

Page 1-A



```
Page 1-B
NODE ATTRIBUTES:
NSPEC
        IS C
                  AT
        IS C
NSPEC
                  AT
                       2
NSPEC
        IS C
                  AT
                       3
NSPEC
        IS C
                  AT
                       4
NSPEC
        IS C
                  AT
                       5
        IS C
NSPEC
                  AT
NSPEC
       IS C
                  AT
NSPEC
       IS C
                  AT
                       8
NSPEC
        IS R
                  AT
                       9
NSPEC
        IS R
                  AT
                      10
NSPEC
        IS R
                  AT
                      11
NSPEC
        IS R
                  AT
                     12
NSPEC
        IS R
                  AT
                     13
NSPEC
        IS C
                  AT
                     14
NSPEC
        IS C
                  AT
                     15
NSPEC
        IS C
                  AT
                      16
NSPEC
        IS R
                  AT
                      17
NSPEC
        IS R
                  AT
                     18
NSPEC
       IS R
                  AT
                     19
NSPEC
        IS R
                  AT 20
NSPEC
       IS R
                  AT 21
NSPEC
        IS R
                  AT
                     22
NSPEC
        IS R
                  AT
                     23
NSPEC
        IS R
                  AT
                     24
NSPEC
       IS R
                  AT
                     25
NSPEC
       IS R
                  AT 26
NSPEC
       IS C
                  AT 27
NSPEC
       IS C
                  AT 28
NSPEC
        IS C
                  AT
                     29
NSPEC
        IS R
                  AT
                     30
NSPEC
        IS R
                  AT
                     31
NSPEC
        IS R
                  AT
                     32
                     33
       IS R
                  AT
NSPEC
        IS R
                  AT 34
DEFAULT MLEVEL IS ATOM
                      1 2 3 4 5 6 7 8 14 15 16 27 28 29
MLEVEL IS CLASS AT
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

114 1632 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON FUKUDA N?/AU L15 83 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON KISHIOKA H?/AU L16 3217 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON SIGNIOWAN H?/AU

L19 6 SEA FILE=WPIX SSS FUL L7

L20 4 SEA FILE=WPIX SPE=ON ABB=ON PLU=ON L19/DCR

L21 3 SEA FILE=WPIX SPE=ON ABB=ON PLU=ON (L14 OR L15 OR L16) AND L20

=> DUP REM L17 L21

FILE 'HCAPLUS' ENTERED AT 14:51:55 ON 06 JUL 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIX' ENTERED AT 14:51:55 ON 06 JUL 2009

COPYRIGHT (C) 2009 THOMSON REUTERS PROCESSING COMPLETED FOR L17

PROCESSING COMPLETED FOR L21

L26 3 DUP REM L17 L21 (1 DUPLICATE REMOVED)

ANSWER '1' FROM FILE HCAPLUS ANSWERS '2-3' FROM FILE WPIX

=> D IBIB ABS ED HITSTR 1; D IBIB AB HITSTR 2-3

L26 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2005:232612 HCAPLUS Full-text

DOCUMENT NUMBER: 142:292558

TITLE: Development of human transforming growth

factor-β1 gene expression suppressor agents

INVENTOR(S): Fukuda, Noboru; Kishioka, Hirofumi

; Sugiyama, Hiroshi

PATENT ASSIGNEE(S): Nihon University, Japan

SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE ---------WO 2005023248 A1 20050317 WO 2004-JP12854 20040903 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG DE 112004001603 T5 20060706 DE 2004-112004001603 20040903 <--CN 1845733 A 20061011 CN 2004-80025429 20040903 <--

US 20080103187 A1 20080501 US 2006-570159 20060301 <--PRIORITY APPLN. INFO.: JP 2003-312365 A 20030904 <--WO 2004-JP12854 W 20040903 <--

- AB A TGF- β (transforming growth factor β 1) gene targeting expression inhibitor containing a pyrrole-imidazole polyamide having Py (N-methylpyrrole) unit, Im (N-methylimidazole) unit and γ -aminobutyrate unit which can be fitted into an U-shaped conformation at the Y-aminobutyrate unit in the minor groove in a double helix target region containing a complementary chain corresponding to the sequence at the -557 to -536 in DNA sequence of human TGF- $\beta1$ promoter. In the double helix target region, either as a whole (TAAAGGAGAGCAATTCTTACAG) or parts (GCAATTCTTACA or TTCTTAC) of wherein a Py/Im pair corresponds to a C-G base pair, an Im/Py pair corresponds to a G-C base pair, and Py/Py pairs correspond resp. to an A-T base pair and a T-A base pair. The pyrroleimidazole polvamide suppressor contains β-alanine unit and its carboxy group forms amide (with N, N-dimethylaminopropylamine) at its polyimide terminal region. The FITC-conjugate form of the pyrrole-imidazole polyamide has been also claimed. The dsDNA-binding activity, in vitro transcription suppression activity using HeLa cell extract, condensation into cell nucleus and inhibitions of the productions TGF-\$1 mRNA and protein product in human vascular smooth muscle cells of the synthetic polyamide were demonstrated. The potential use of the synthetic polyamide as a therapeutics for the TGF-81associated cardiovascular diseases were emphasized. ED
- Entered STN: 17 Mar 2005
- ΙT 847860-70-2
 - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (development of human transforming growth factor-β1 gene expression suppressor agents)
- 847860-70-2 HCAPLUS RN

CN

B-Alanine, 4-(acetylamino)-1-methyl-1H-imidazole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-βalanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

PAGE 2-A

PAGE 3-A

AcNH

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN

ACCESSION NUMBER: 2007-343923 [32] WPIX

DOC. NO. CPI: C2007-125369 [32]

TITLE: Connective tissue growth factor (CTGF) gene expression inhibitor for treating CTGF associated disease, has pyrrole imidazole polyamide having N-methyl pyrrole,

N-methyl imidazole and gamma-aminobutryic acid units DERWENT CLASS: B03

INVENTOR: FUKUDA N; SUGIYAMA N; UENO T

PATENT ASSIGNEE: (GENT-N) GENTIER BIOSYSTEMS INC: (UYNI-N) UNIV NIPPON

COUNTRY COUNT: 115

PATENT INFO ABBR.:

| I | PAT | ENT | NO | KIND | DATE | WEEK | LA | PG | MAIN | IPC |
|---|-----|-----|---------|------|----------|-----------|----|-------|------|-----|
| | | | | | | | | | | |
| Ţ | ΙO | 200 | 7034784 | A1 | 20070329 | (200732)* | JA | 34[6] | | |
| | JΡ | 200 | 7536491 | Х | 20090326 | (200922) | JA | 24 | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APE | PLICATION | DATE |
|---------------|-------------------|-----|--------------|-------------|
| | | | | |
| WO 2007034784 | A1 | WO | 2006-JP31851 | .2 20060919 |
| JP 2007536491 | X PCT Application | WO | 2006-JP31851 | .2 20060919 |
| JP 2007536491 | X | JΡ | 2007-536491 | 20060919 |

FILING DETAILS:

| PATENT NO | KIND | | PATENT NO | |
|---------------|------|----------|-----------------|--|
| | | | | |
| JP 2007536491 | X | Based on | WO 2007034784 A | |

PRIORITY APPLN. INFO: JP 2005-272137 20050920 AB WO 2007034784 A1 UPAB: 20090407

NOVELTY — A connective tissue growth factor (CTGF) gene expression inhibitor comprises pyrrole imidazole polyamide containing N-methyl pyrrole unit (Fy), N-methyl midazole unit (Im) and a gamma-aminobutryic acid unit, where the pyrrole imidazole polyamide is folded up at the region of gamma-aminobutryic acid, to enable U-shaped confirmation, in which Py/Im, Im/Py and Py/Py pairs correspond to base pairs of target of CTGF promoter.

DETAILED DESCRIPTION - A connective tissue growth factor (CTGF) gene expression inhibitor comprises pyrrole-imidazole polyamide containing N-methyl pyrrole unit (Py), N-methyl imidazole unit (Im) and a gamma-aminobutryic acid unit, where the pyrrole-imidazole polyamide is folded into an U-shaped conformation at the gamma-aminobutryic acid unit site, in a minor groove of a double strand region (being target region) containing a portion or all of the base sequence (SEO ID Number 2) corresponding to -195 to -150 of human CTGF promoter and a strand complementary to it, and in the folded region, a Py/Im pair corresponds to C-C base pair, an Im/Py pair corresponds to G-C base pair, and Py/Py pair corresponds to A-T base pair and T-A base pair, of the target region.

ACTIVITY - Antiinflammatory; Respiratory-Gen.; Dermatological; Antidiabetic; Ophthalmological.

MECHANISM OF ACTION - CTGF Inhibitor.

In vitro analysis of expression inhibitory effect of connective tissue growth factor (CTGF) messenger ribonucleic acid by pyrrole imidazole polyamide (e.g. GBP2101), was carried out as follows. The human mesangial cell derived from a kidney was cultivated in a serum free medium for 24 hours. Then, PMA (12-O-tetraadecanoy)phorbol-13-acetate) (1x10-6 M) was added to the human mesangial cell culture and the cells were stimulated. Then, GBP2101 was added and cultivation was carried out in serum free medium for 24 hours. After cultivation, messenger ribonucleic acid was isolated by guanidium thiocyanate method, from the cell, subjected to reverse transcription by avian myeloblastoma virus reverse transcriptase, and then amplified by PCR. The PCR product was assayed using primers specific for CTGF gene. The increase in CTGF gene expression amount by PMA stimulation, was found to be suppressed by the addition of GBP2101. The ICSO value of GBP2101 was found to be Ix10-6 M.

USE - The CTGF gene expression inhibitor is useful for inhibiting expression of CTGF gene (claimed), and for treating CTGF associated disease such as fibrous proliferative disease, blood vessel proliferative disease, arteriosclerosis proliferative disease, pulmonary fibrosis, skin fibrosis and diabetic retinopathy.

ADVANTAGE - The CTGF gene expression inhibitor has a structure having high specificity with respect to CTGF gene, as the inhibitor couples to the specific region of the promoter of human CTGF and inhibits expression of the CTGF gene. The inhibitor does not exhibit side effects like chemotherapeutic drug since the CTGF gene expression is specifically suppressed. The inhibitor is highly stable as it is not degraded by RNase.

DESCRIPTION OF DRAWINGS - The figure shows a graph representing the expression inhibitory effect of connective tissue growth factor messenger ribonucleic acid, by GBP2101. (Drawing includes non-English language text) AN.S DCR-1471302

SDCN RAOSN7

L26 ANSWER 3 OF 3 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN

ACCESSION NUMBER: 2003-767409 [72] WPIX

DOC. NO. CPI: C2003-210899 [72]

TITLE: New hairpin type polyamide used for treating cancer contains pyrrole and imidazole units and alkylation site

DERWENT CLASS: B03; B04
INVENTOR: BANDO T; SAITO I; SAITO R; SUGIYAMA H

O 1, SAITO 1, SAITO K, SCOLIMA

PATENT ASSIGNEE: (BAND-I) BANDO T; (NISC-N) JAPAN SCI & TECHNOLOGY AGENCY;

(NISC-N) JAPAN SCI & TECHNOLOGY CORP; (KAGA-N) KAGAKU GIJUTSU SHINKO JIGYODAN; (SAIT-I) SAITO I; (SUGI-I)

SUGIYAMA H

COUNTRY COUNT: 29

PATENT INFO ABBR.:

| PATENT NO | KIND DATE | WEEK | LA | PG | MAIN IPC |
|---------------|---------------|-----------|----|-------|----------|
| | | | | | |
| WO 2003076412 | A1 20030918 | (200372)* | JA | 46[9] | |
| JP 2003261541 | A 20030919 | (200372) | JA | 21 | |
| EP 1491534 | A1 20041229 | (200502) | EN | | |
| US 2005017664 | 7 A1 20050811 | (200554) | EN | | |
| JP 3898532 | B2 20070328 | | JA | 24 | |
| US 7456294 | B2 20081125 | (200880) | EΝ | | |

APPLICATION DETAILS:

| PATE | ENT NO | KIND | | APE | LICATION | DATE |
|------|-------------|----------|-------------|-----|-------------|----------|
| WO 2 | 2003076412 | A1 | | WO | 2003-JP2423 | 20030303 |
| JP 2 | 2003261541 | A | | JP | 2002-63608 | 20020308 |
| JP 3 | 3898532 B2 | | | JP | 2002-63608 | 20020308 |
| EP 1 | 1491534 A1 | | | EP | 2003-707192 | 20030303 |
| EP 1 | 1491534 A1 | PCT App | lication | WO | 2003-JP2423 | 20030303 |
| US 2 | 20050176647 | A1 PCT | Application | WO | 2003-JP2423 | 20030303 |
| US 2 | 20050176647 | / A1 | | US | 2004-507004 | 20040908 |
| US 7 | 7456294 B2 | PCT App. | lication | WO | 2003-JP2423 | 20030303 |
| HS 7 | 7456294 B2 | | | TIS | 2004-507004 | 20040908 |

FILING DETAILS:

| PATE | ENT NO | KIND | | PATENT NO | | | | | | | |
|------|---------|------|---------------|-----------|------------|-------|--|--|--|--|--|
| JP 3 | 3898532 | B2 | Previous Publ | JP | 2003261541 | A | | | | | |
| EP I | 1491534 | A1 | Based on | WO | 2003076412 | Α | | | | | |
| US 7 | 7456294 | B2 | Based on | WO | 2003076412 | Α | | | | | |

PRIORITY APPLN. INFO: JP 2002-63608 20020308

AB WO 2003076412 A1 UPAB: 20060120

NOVELTY - New hairpin type polyamide (I) contains N-methyl-pyrrole and N-methyl imidazole polyamide terminals and an alkylation site linked through a vinyl linker.

ACTIVITY - Cytostatic.

No biological data is given.

MECHANISM OF ACTION - None given.

USE - Used for suppressing gene expression and treating cancer.

ADVANTAGE - (I) Provides both sequence recognition and DNA alkylation of specific sequences higher than known functional molecules. The imidazole and pyrrole units bind to specific bases so that the hairpin can be designed to bond to specific sequences.

AN.S DCR-792143

SDCN RABZQW

AN.S DCR-792145 SDCN RABZQY

Structure Search

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 14:54:04 ON 06 JUL 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 6 Jul 2009 VOL 151 ISS 2 FILE LAST UPDATED: 5 Jul 2009 (20090705/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

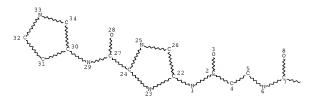
CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

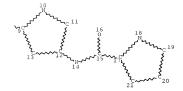
This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D STAT QUE L13



Page 1-A



```
Page 1-B
NODE ATTRIBUTES:
NSPEC
       IS C
                  AT
                       1
NSPEC
        IS C
                  AT
NSPEC
       IS C
                  AT
                       3
NSPEC
       IS C
                  AT
                       4
NSPEC
        IS C
                  AT
                       5
NSPEC
        IS C
                  AT
                       6
NSPEC
        IS C
                       7
                  AT
NSPEC
       IS C
                  AT
                       8
NSPEC
       IS R
                  AT
                      9
NSPEC
       IS R
                  AT 10
NSPEC
       IS R
                  AT
                     11
NSPEC
        IS R
                  AT
                      12
NSPEC
        IS R
                  AT
                      13
NSPEC
        IS C
                  AT
                     14
NSPEC
       IS C
                  AT
                     15
NSPEC
       IS C
                  AT
                     16
NSPEC
       IS R
                  AT
                     17
NSPEC
        IS R
                  AT
                     18
NSPEC
        IS R
                  AT
                      19
NSPEC
        IS R
                  AT
                     20
NSPEC
       IS R
                  AT
                     21
NSPEC
       IS R
                  AT
                     22
NSPEC
       IS R
                  AT 23
NSPEC
       IS R
                  AT 24
NSPEC
       IS R
                  AT
                     25
NSPEC
       IS R
                  AT
                     26
NSPEC
       IS C
                  AT
                     27
NSPEC
       IS C
                  AT
                     28
       IS C
                  AT 29
NSPEC
NSPEC
       IS R
                  ΑT
                     30
NSPEC
       IS R
                  AT
                     31
NSPEC
       IS R
                  AT
                     32
NSPEC
        IS R
                  ΑT
                     33
NSPEC
        IS R
                  AT
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT
                         2 3 4 5 6 7 8 14 15 16 27 28 29
                       1
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 34

Page 14 of 495

<200941/DW>

STEREO ATTRIBUTES: NONE

L10 335 SEA FILE-REGISTRY SSS FUL L7

L12 22 SEA FILE-HCAPLUS SPE-ON ABB-ON PLU-ON L10

13 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L12 AND (PRY<=2004 OR

AY<=2004 OR PD<=2004 OR PY<=2004)

=> S L13 NOT L17

12 L13 NOT L17

=> FILE WPIX

FILE 'WPIX' ENTERED AT 14:55:00 ON 06 JUL 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE LAST UPDATED:

2 JUL 2009 <20090702/UP>

MOST RECENT UPDATE:

200941

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> Now containing more than 1.4 million chemical structures in DCR <<<

>>> IPC, ECLA and US National Classifications have been updated with reclassifications to March 15th, 2009.

F-Term and FI-Term original classifications are current and

reclassification will commence in June. No update date (UP) has been created for the reclassified

documents, but they can be identified by

specific update codes (see HELP CLA for details) <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.com/stn guide.html

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://scientific.thomsonreuters.com/support/patents/coverage/latestupdates/

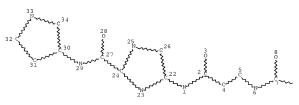
EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0: http://www.stn-international.com/DWPIAnaVist2_0608.html

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

'BI, ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> D STAT QUE L20

L7 STR



```
Page 1-A
```

```
Page 1-B
NODE ATTRIBUTES:
NSPEC
        IS C
                  AT
NSPEC
        IS C
                  AT
                       2
NSPEC
        IS C
                  AT
                       3
NSPEC
        IS C
                  AT
                       4
NSPEC
        IS C
                  AT
NSPEC
        IS C
                  AT
                       6
NSPEC
       IS C
                  AT
                       7
NSPEC
       IS C
                  AT
NSPEC
       IS R
                  AT
                       9
NSPEC
       IS R
                  AT
                     10
NSPEC
        IS R
                  AT
                      11
NSPEC
        IS R
                  AT
                      12
NSPEC
        IS R
                  AT
                     13
NSPEC
       IS C
                  AT
                     14
NSPEC
       IS C
                  AT
                     15
NSPEC
       IS C
                  AT
                     16
NSPEC
        IS R
                  AT
                     17
NSPEC
        IS R
                  AT
                      18
NSPEC
        IS R
                  AT
                     19
                     20
NSPEC
       IS R
                  AT
NSPEC
       IS R
                  AT 21
NSPEC
       IS R
                  AT 22
NSPEC
       IS R
                  AT 23
NSPEC
        IS R
                  AT
                     24
NSPEC
        IS R
                  AT
                     25
NSPEC
       IS R
                  ΑT
                     26
NSPEC
       IS C
                  AT 27
                  AT 28
NSPEC
       IS C
NSPEC
       IS C
                  AT 29
NSPEC
       IS R
                  ΑT
                     30
NSPEC
       IS R
                  AT
                     31
NSPEC
        IS R
                  ΑT
                     32
NSPEC
        IS R
                  ΑT
                      33
                  AT
NSPEC
        IS R
                     34
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT
                     1 2 3 4 5 6 7 8 14 15 16 27 28 29
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 34

```
STEREO ATTRIBUTES: NONE
L19
           6 SEA FILE-WPIX SSS FUL L7
L20
             4 SEA FILE-WPIX SPE-ON ABB-ON PLU-ON L19/DCR
=> S L20 NOT L21
L28 1 L20 NOT L21
=> DUP REM L27 L28 L25
FILE 'HCAPLUS' ENTERED AT 14:55:43 ON 06 JUL 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'WPIX' ENTERED AT 14:55:43 ON 06 JUL 2009
COPYRIGHT (C) 2009 THOMSON REUTERS
FILE 'MARPAT' ENTERED AT 14:55:43 ON 06 JUL 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)
PROCESSING COMPLETED FOR L27
PROCESSING COMPLETED FOR L28
PROCESSING COMPLETED FOR L25
L29
            16 DUP REM L27 L28 L25 (1 DUPLICATE REMOVED)
               ANSWERS '1-12' FROM FILE HCAPLUS
               ANSWER '13' FROM FILE WPIX
               ANSWERS '14-16' FROM FILE MARPAT
=> D IBIB ED ABS HITSTR 1-12; D IBIB AB HITSTR 13; D IBIB AB HITSTR 14-16
L29 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1262611 HCAPLUS Full-text
DOCUMENT NUMBER:
                        144:17149
TITLE:
                       Methods of treating cancer by inhibiting histone gene
                        expression
INVENTOR(S):
                        Dervan, Peter B.; Dickinson, Liliane A.; Arora,
                       Paramjit; Gottesfeld, Joel M.; Burnett, Ryan
PATENT ASSIGNEE(S):
                      California Institute of Technology, USA
SOURCE:
                        PCT Int. Appl., 66 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                     KIND DATE APPLICATION NO. DATE
                       ----
    WO 2005112924
WO 2005112924
                        A2 20051201 WO 2005-US14631
                                                                 20050427 <--
                        A3 20060817
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
            NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
```

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, Page 17 of 495

ZM. ZW

SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,

US 2004-611687P

EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 20060019972 A1 20060126 US 2005-116959 20050427 <--PRIORITY APPLN, INFO,: US 2004-566017P P 20040427 <--

ED Entered STN: 02 Dec 2005

AB Methods are provided for decreasing the rate or inhibiting neoplastic cell proliferation by reducing or inhibiting histone H4 gene expression or histone H4 activity. Also provided are methods of treating a patient with a neoplastic disease, and compns. useful for treating a cancer patient, including, for example, a composition containing small interfering RNA mols. that reduce or inhibit histone H4 expression in a cell or a composition containing a pyrrole-imidazole polyamide operatively linked to a chemotherapeutic mol.

844864-17-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treating cancer by inhibiting histone gene expression)

844864-17-1 HCAPLUS CN

1H-Imidazole-2-carboxamide, N-[5-[[[(1R)-3-[[4-[4-[bis(2-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3oxopropyl]amino|carbonyl]-1-methyl-1H-pyrrol-3-yl]amino|carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]propyl]amino]carbonyl]-1-methyl-1H-pyrrol-3y1]-1-methy1-4-[[3-[[[1-methy1-4-[[(1-methy1-1H-imidazo1-2v1)carbonv1]amino]-1H-pvrrol-2-v1]carbonv1]amino]-1-oxopropv1]amino]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

P 20040921 <--

PAGE 1-C

PAGE 2-A

 $\begin{array}{ccc} & & & \\ \text{page 2-B} & & \\ \text{me} & & \text{me} \end{array}$

REFERENCE COUNT: THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS 1 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:1010384 HCAPLUS Full-text

DOCUMENT NUMBER: 142:232325

TITLE: Arresting cancer proliferation by small-molecule gene

regulation

AUTHOR(S): Dickinson, Liliane A.; Burnett, Ryan; Melander, Christian; Edelson, Benjamin S.; Arora, Paramiit S.;

Dervan, Peter B.; Gottesfeld, Joel M.

CORPORATE SOURCE: Department of Molecular Biology, The Scripps Research

Institute, La Jolla, CA, 92037, USA Chemistry & Biology (2004), 11(11), SOURCE:

1583-1594

CODEN: CBOLE2; ISSN: 1074-5521

PUBLISHER: Cell Press DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 24 Nov 2004

AB A small library of pyrrole-imidazole polyamide-DNA alkylator (chlorambucil) conjugates was screened for effects on morphol. and growth characteristics of a human colon carcinoma cell line, and a compound was identified that causes cells to arrest in the G2/M stage of the cell cycle. Microarray anal. indicates that the histone H4c gene is significantly downregulated by this polyamide. RT-PCR and Western blotting expts. confirm this result, and siRNA to H4c mRNA yields the same cellular response. Strikingly, reduction of H4 protein by >50% does not lead to widespread changes in global gene expression. Sequence-specific alkylation within the coding region of the H4c gene in cell culture was confirmed by LM-PCR. The compound is active in a wide range of cancer cell lines, and treated cells do not form tumors in nude mice. compound is also active in vivo, blocking tumor growth in mice, without obvious animal toxicity.

844864-17-1

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (arresting cancer proliferation by small-mol. gene regulation)

RN 844864-17-1 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[(1R)-3-[[4-[4-[bis(2-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Hpyrrol-3-y1]amino]carbony1]-1-methy1-1H-imidazo1-4-y1]amino]-3oxopropy1]amino]carbony1]-1-methy1-1H-pyrro1-3-y1]amino]carbony1]-1-methy1-1H-pyrro1-3-y1]amino]carbony1]propy1]amino]carbony1]-1-methy1-1H-pyrro1-3yl]-1-methyl-4-[[3-[[[1-methyl-4-[[(1-methyl-1H-imidazol-2v1)carbonv1]amino]-1H-pvrrol-2-v1]carbonv1]amino]-1-oxopropv1]amino]- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

PAGE 2-B

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:120017 HCAPLUS Full-text

DOCUMENT NUMBER: 141:261037

TITLE: A Liquid-Phase Synthesis of DNA-Binding Polyamides

Using Oligocarboxamide Blocks
AUTHOR(S): Sinvakov, A. N.: Feshchenko, M

AUTHOR(S): Sinyakov, A. N.; Feshchenko, M. V.; Ryabinin, V. A. CORPORATE SOURCE: Vector State Research Center of Virology and

Biotechnology, Institute of Molecular Biology,

Novosibirsk oblast, 630559, Russia

Russian Journal of Bioorganic Chemistry (Translation

of Bioorganicheskaya Khimiya) (2004), 30(1),

98-99

CODEN: RJBCET; ISSN: 1068-1620

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:261037

ED Entered STN: 13 Feb 2004

SOURCE:

AB A method was developed for the synthesis of sequence-specific polyamides on the basis of 4-amino-1-methylpyrrole-2-carboxylic acid, 4-amino-1-

methylimidazole-2-carboxylic acid, β -alanine, and γ -aminobutyric acid. Dimeric and trimeric oligocarboxamides were used as building blocks. Our synthetic scheme was applied to the synthesis of DNA minor groove binders containing up to twelve carboxamide units.

II 754226-96-5P 754226-97-6P 754226-98-7P

754227-05-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(liquid-phase synthesis of DNA-binding polyamides using oligocarboxamide blocks)

RN 754226-96-5 HCAPLUS

PAGE 1-B

- (CH2)3-NH2

RN 754226-97-6 HCAPLUS

oxopropy1]amino]-1-methyl-1H-imidazol-2-y1]carbonyl]amino]-1-methyl-,
ethyl ester (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

RN 754226-98-7 HCAPLUS

yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1oxopropyl]amino]-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl- (CA
INDEX NAME)

PAGE 1-B

PAGE 1-C

RN 754227-05-9 HCAPLUS

PAGE 2-A

PAGE 3-A

PAGE 4-A

T 754227-02-6P 754227-06-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (liquid-phase synthesis of DNA-binding polyamides using oligocarboxamide blocks)

RN 754227-02-6 HCAPLUS CN 1H-Pyrrole-2-carboxy

PAGE 1-B

PAGE 1-C

- RN 754227-06-0 HCAPLUS

PAGE 1-B

PAGE 1-C

$$-\operatorname{CH}_2 - \overset{\text{\mathbb{N}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}{\overset{\text{$\mathbb{N}}}}{\overset{\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}{\overset{\text{$\mathbb{N}}}}}{\overset{\mathbb{N}}}\overset{\text{$\mathbb{N}}}}{\overset{\mathbb{N}}}}{\overset{\mathbb{N}}}{\overset{\mathbb{N}}}\overset{\mathbb{N}}}{\overset{\mathbb{N}}}\overset{\mathbb{N}}}{\overset{\mathbb{N}}}}{\overset{\mathbb{N}}}\overset{\mathbb{N}}{\overset{\mathbb{N}}}}{\overset{\mathbb{N}}}\overset{\mathbb{N}}}{\overset{\mathbb{N}}}}{\overset{\mathbb{N}}}}\overset{\mathbb{N}}}{\overset{\mathbb{N}}}\overset{\mathbb{N}}}{\overset{\mathbb{N}}}\overset{\mathbb{N}}}{\overset{\mathbb{N}$$

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:377027 HCAPLUS Full-text

DOCUMENT NUMBER: 138:396243

TITLE: Polyamide modulators of COX2 transcription

INVENTOR(S): Phillion, Dennis P.; Crowley, Kathleen S.; Bashkin, James K.; Schweitzer, Barbara A.; Burnett, Barry L.;

Woodard, Scott S.

PATENT ASSIGNEE(S): Pharmacia Corporation, USA SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | | | | | | KIND DATE | | | APPLICATION NO. | | | | | | | | | |
|----------|---------------------------------|------|-----|-----|-----|-----|--------------|--------------|-----------------|-----------------|------|------|-----|--------------|--------------|------|-----|---|--|
| WO | 2003 | 0403 | 37 | | A2 | | 2003 2004 | 0515 0311 | | | | | | | | | | < | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, | | |
| | | | | | | | | DM, | | | | | | | | | | | |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE. | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | | |
| | | LS. | LT. | LU. | LV, | MA, | MD, | MG, | MK, | MN, | MW. | MX, | MZ, | NO. | NZ, | OM, | PH, | | |
| | | PL, | PT. | RO, | RU, | SC, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM. | TN, | TR, | TT, | | |
| | TZ, UA, UG, US, UZ, VC, VN, | | | | | | | | | | | | | | | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, | | | | | | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, | | | | |
| | KG, KZ, MD, RU, TJ, TM, AT, | | | | | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | | | | | |
| | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | SK, | TR, | BF, | ВJ, | CF, | | |
| | | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | |
| CA | 2466 | 391 | | | A1 | | 2003 | 0515 | | CA 2 | 002- | 2466 | 391 | | 2 | 0021 | 107 | < | |
| AU | 2002 | 3569 | 16 | | A1 | | 2003 | 0519 | AU 2002-356916 | | | | | | 20021107 < | | | | |
| US | 2003 | 0119 | 891 | | A1 | | 2003 | 0626 | | US 2 | 002- | 2897 | 94 | 20021107 < | | | | | |
| EP | 1442 | 022 | | | A2 | | 2004 | 0804 | | EP 2 | 002- | 8028 | 75 | | 2 | 0021 | 107 | < | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | | |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | SK | | | | |
| BR | 2002 | 0139 | 88 | | A | | 2004 | 0831 | | BR 2 | 002- | 1398 | В | | 2 | 0021 | 107 | < | |
| JP | JP 2005508181 T 20050331 | | | | | | 0331 | | JP 2 | 003- | 5425 | 84 | | 2 | 0021 | 107 | < | | |
| MX | MX 2004004366 A 20040910 | | | | | | | 0910 | | MX 2 | 004- | 4366 | | | 2 | 0040 | 507 | < | |
| PRIORIT: | IORITY APPLN. INFO.: | | | | | | | | US 2001-344859P | | | | | P 20011107 < | | | | | |
| | | | | | | | | | US 2002-419405P | | | | | 1 | P 2 | 0021 | 018 | < | |
| | | | | | | | | | WO 2002-US35718 | | | | | 1 | W 20021107 < | | | | |

ED Entered STN: 16 May 2003

AB Processes and compns. are provided for regulating COX2 gene expression in a cell. The process includes selecting a polyamide composition comprising N-Me pyrrole (Fy) and N-Me imidazole (Im) to provide specific binding to DNA at a COX2 gene target site in a cell. The polyamide is then combined with the cell containing the COX2 gene, wherein the polyamide binds to the COX2 gene promoter target site and regulates transcription of the COX2 gene.

IT 524713-26-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyamide modulators of COX2 transcription)

RN 524713-26-6 HCAPLUS

1H-Imidazole-2-carboxamide, N-[4-[4-[[4-[[4-[[3-[[5-[[5-[[5-[[3-[[3-([dimthylamino)propyl]amino]-3-oxpropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1+[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1-1-methyl-4-[1-1-methyl-4-[1-1-methyl-4-[1-methyl-4-[1-methyl-4-[1-1-methyl-4-[1-methyl-4-[1-1

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:964348 HCAPLUS Full-text

DOCUMENT NUMBER: 138:39181

TITLE: Preparation of poly-pyrrole substituted benzothiophene

compounds having antiinfective activity

INVENTOR(S): Burli, Roland W.; Baird, Eldon E.; Taylor, Matthew J.;

Kaizerman, Jacob A.; Hu, Wenhao PATENT ASSIGNEE(S): Genesoft, Inc., USA

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PA' | TENT : | NO. | | | | | | APPLICATION NO. | | | | | | | | | | |
|-----|------------------------|------|-----|-----|-----|-----|------|-----------------|------|------|------|------|------|-----|-----|------|-----|---|
| | | | | | | - | | | | | | | | | | | | |
| WO | 2002 | 1008 | 52 | | A1 | | 2002 | 1219 | | WO 2 | 002- | US17 | 952 | | 2 | 0020 | 606 | < |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | |
| | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | CH, | |
| | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | |
| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | |
| CA | 2450 | 628 | | | A1 | | 2002 | 1219 | | CA 2 | 002- | 2450 | 628 | | 2 | 0020 | 606 | < |
| | 2002 | | | | | | | | | | | | | | | | | |
| US | 2004 | 0142 | 971 | | A1 | | 2004 | 0722 | | US 2 | 002- | 1658 | 56 | | 2 | 0020 | 606 | < |
| US | 6825 | 228 | | | B2 | | 2004 | 1130 | | | | | | | | | | |
| EP | 1470 | 119 | | | A1 | | 2004 | 1027 | | EP 2 | 002- | 7347 | 16 | | 2 | 0020 | 606 | < |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT. | |
| | | | | | | | | MK. | | | | | | | | , | | |
| JP | 2005 | 5055 | 08 | | T | | 2005 | 0224 | | JP 2 | 003- | 5036 | 19 | | 2 | 0020 | 606 | < |
| US | 2006 | 0116 | 326 | | A1 | | 2006 | 0601 | | US 2 | 004- | 1237 | | | 2 | 0041 | 130 | < |
| US | 7329 | 765 | | | B2 | | 2008 | 0212 | | | | | | | | | | |
| US | 2006 | 0069 | 034 | | A1 | | 2006 | 0330 | | US 2 | 004- | 4615 | | | 21 | 0041 | 202 | < |
| | 7348 | | | | | | | | | | | | | | | | | |
| | 2008 | | | | | | | | | US 2 | 008- | 2025 | 6 | | 2 | 0080 | 125 | < |
| | PRIORITY APPLN. INFO.: | | | | | | | | | | | | | | | | | < |
| | | | | | | | | | 3251 | | | | 0010 | | | | | |

Page 32 of 495

US 2001-342309P P 20011221 <-US 2002-165764 B1 20020606 <-US 2002-165856 A1 20020606 <-WO 2002-US17952 W 20020606 <-US 2004-4615 A1 20041202 <--

OTHER SOURCE(S): MARPAT 138:39181

ED Entered STN: 20 Dec 2002

GT

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. I [R5 = H, F, Cl. Br, I, CN, OH, NH2, etc.; n = 1-25; Y = alkylene, (hetero)aromatic; Z = O, N; m = 1 if Z = O, m = 2 if Z = N; R2 = H, alkyl, heteroalkyl] are prepared For instance, II (prior art) was coupled to 3-chlorobenzothiophene-2-carboxylic acid (DMF, HBTU, i-Fr2NEt, 30 min, 37°) to give III. I are DNA binding compds. exhibiting antibacterial activity. III has MIC ≤ 4 μg/mL against B. cereus, S. aureus, S. epidermidis, E. faecium, and S. pneumoniae.
- IT 47839-86-9P Rl: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 - (preparation of poly-pyrrole substituted benzothiophene compds. having antiinfective and DNA binding activity)
- RN 478399-86-9 HCAPLUS
- NATION 1 NAT

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:191196 HCAPLUS Full-text
DOCUMENT NUMBER: 132:232754

TITLE: Inhibition of oncogene transcription by synthetic

polyamides

INVENTOR(S): Dervan, Peter B.

PATENT ASSIGNEE(S): California Institute of Technology, USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | TENT | NO. | | | KIN | D | DATE | | APPLICATION NO. | | | | | | | DATE | | | |
|---------------|------|-----|-----|------------|-----|-----|------|------|-----------------|------|-------|------|-----|-----|------------|------|-----|--|--|
| | | | | | | _ | | | | | | | | | | | | | |
| WO 2000015773 | | | | | A2 | | 2000 | 0323 | 1 | WO 1 | 999-1 | US20 | 489 | | 19990910 < | | | | |
| WO 2000015773 | | | | A3 2000081 | | | 0817 | 1 | | | | | | | | | | | |
| | W: | ΑE, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | CU, | | |
| | | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | | |
| | | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | | |
| | | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | | |

| | | SL, | TJ, | TM, | TR, | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW | | | | |
|---------|-------|------|------|-----|-----|-----|------|------|-----|-------|-------|------|-----|-----|-----|------|-----|---|
| | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SL, | SZ, | UG, | ZW, | AT, | BE, | CH, | CY, | DE, | DK, | |
| | | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | |
| | | CI, | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | |
| CA | 2342 | 278 | | | A1 | | 2000 | 0323 | (| CA 1 | 999- | 2342 | 278 | | 13 | 9990 | 910 | < |
| AU | 9959 | 108 | | | A | | 2000 | 0403 | - 1 | AU 1 | 999- | 5910 | 8 | | 1 | 9990 | 910 | < |
| EP | 1112 | 267 | | | A2 | | 2001 | 0704 | 1 | EP 1 | 999- | 9467 | 79 | | 1 | 9990 | 910 | < |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | |
| | | IE, | SI, | LT, | LV, | FI, | RO | | | | | | | | | | | |
| JP | 2003 | 5055 | 21 | | T | | 2003 | 0212 | | JP 2 | 000- | 5703 | 00 | | 1 | 9990 | 910 | < |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | 1 | US 1 | 998- | 9985 | 4P | 1 | P 1 | 9980 | 911 | < |
| | | | | | | | | | 1 | 70 1º | 999-1 | TS20 | 489 | 1 | 7 1 | 9990 | 910 | < |

- D Entered STN: 24 Mar 2000
- AB Polyamides capable of inhibiting the transcription of oncogenes are provided. Preferred polyamides comprising at least 3 complementary pairs of aromatic carboxamide residues bind in the minor groove of double-stranded DNA. More specifically, derivs. of N-methylpyrrole, N-methylmidazole, and/or 3-hydroxy-N-methylpyrrole, and strategically positioned aliphatic amino acid residues (glycine, B-alanine, y-aminobutyric acid, R-2,4-diaminobutyric acid, 5-aminovaleric acid) form structures with N,N-dimethylaminopropyl termini. With regard to each polyamide, the complementary pairing of some or all of the polyamide's aromatic carboxamide residues dets. the target nucleotide sequence of an identified dsDNA target in the promoter region of an oncogene. Specific polyamides are designed to inhibit the ESX and AP-2 sites in the promoter of the HER-2/neu gene.
- IT 261363-95-5 261364-10-7 261364-12-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (inhibition of oncogene transcription by synthetic polyamides)
- RN 261363-95-5 HCAPLUS

CN

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

RN 261364-10-7 HCAPLUS

Absolute stereochemistry.

Page 36 of 495

PAGE 1-B

PAGE 1-C

PAGE 1-D

RN 261364-12-9 HCAPLUS

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C

Page 38 of 495

PAGE 1-D



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:578977 HCAPLUS Full-text

DOCUMENT NUMBER: 134:52156

TITLE: Targeting the Ets binding site of the HER2/neu promoter with pyrrole-imidazole polyamides

AUTHOR(S): Chiang, Shu-Yuan; Burli, Roland W.; Benz, Chris C.;

Gawron, Loretta; Scott, Gary K.; Dervan, Peter B.; Beerman, Terry A.

CORPORATE SOURCE: Department of Pharmacology and Therapeutics, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA

SOURCE: Journal of Biological Chemistry (2000),

275(32), 24246-24254

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 Aug 2000

AB Three DNA binding polyamides (1-3) were synthesized that bind with high affinity (K α = 8.7·109 M-1 to 1.4·1010 M-1) to two 7-base pair sequences overlapping the Ets DNA binding site (EBS; GAGGAA) within the regulatory region of the HER2/neu proximal promoter. As measured by electrophoretic mobility shift assay, polyamides binding to flanking elements upstream (1) or downstream (2 and 3) of the EBS were one to two orders of magnitude more effective than the natural product distamycin at inhibiting formation of complexes between the purified EBS protein, epithelial restricted with serine box (ESX), and the HER2/neu promoter probe. One polyamide, 2, completely blocked Ets-DNA complex formation at 10 nM ligand concentration, whereas formation of activator protein-2-DNA complexes was unaffected at the activator protein-2 binding site immediately upstream of the HER2/neu EBS, even at 100 nM ligand concentration At equilibrium, polyamide 1 was equally effective at inhibiting Ets/DNA binding when added before or after in vitro formation of protein-promoter complexes, demonstrating its utility to disrupt endogenous Ets-mediated HER2/neu preinitiation complexes. Polyamide 2, the most potent inhibitor of Ets-DNA complex formation by electrophoretic mobility shift assay, was also the most effective inhibitor of HER2/neu promoter-driven transcription measured in a cell-free system using nuclear extract from an ESX- and HER2/neu-overexpressing human breast cancer cell line, SKBR-3.

TT 313945-83-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(targeting Ets binding site of HER2/neu promoter with pyrrole-imidazole polyamides)

RN 313945-83-4 HCAPLUS

PAGE 1-B

$$- \text{NH} - \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{U} - \text{NH} -$$

PAGE 1-C

PAGE 2-A



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN 2000:417743 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 133:248492

TITLE: Recognition of the Minor Groove of DNA by Hairpin

Polyamides Containing α-Substituted-β-Amino

Acids

AUTHOR(S): Floreancig, Paul E.; Swalley, Susanne E.; Trauger,

John W.; Dervan, Peter B.

CORPORATE SOURCE: Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA,

91125, USA

SOURCE: Journal of the American Chemical Society (2000

), 122(27), 6342-6350

CODEN: JACSAT; ISSN: 0002-7863 American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE . English

PUBLISHER:

OTHER SOURCE(S): CASREACT 133:248492

ED Entered STN: 23 Jun 2000

AB Incorporation of the flexible amino acid β -alanine (β) into hairpin polyamides composed of N-methylpyrrole (Py) and N-methylimidazole (Im) amino acids is required for binding to DNA sequences longer than seven base pairs with high affinity and sequence selectivity. Pairing the α -substituted- β -amino acids (S)-isoserine (SIs), (R)-isoserine (RIs), β -aminoalanine (Aa), and α -fluoro- β alanine (Fb) side-by-side with β in hairpin polyamides alters DNA binding affinity and selectivity relative to the parent polyamide containing a β/β pairing. Quant. DNase I footprinting titration studies on a restriction fragment containing the sequences 5'-TGCNGTA-3' (N = A, T, G, and C) show that the polyamide $ImPySIsImPy-\gamma-PyPy\betaImPy-\beta-Dp$ (SIs/ β pairing) binds to N = T (Ka = 4.5+109 M-1) in preference to N = A (Ka = 6.2+108 M-1). This result stands in contrast to the essentially degenerate binding of the parent ImPvβImPv-y- $PyPy\beta ImPy-\beta-Dp$ (β/β pairing) to N = T and N = A, and to the slight preference of $ImPv\beta ImPv-\gamma-PvPvS Is ImPv-\beta-Dp$ ($\beta/S Is pairing$) to N=A over N=T. Addnl., this study reveals that incorporation of RIs, Aa, and Fb into polyamides significantly reduces binding affinity. Therefore, DNA binding in the minor groove is sensitive to the stereochem., steric bulk, and electronics of the substituent at the α -position of β -amino acids in hairpin polyamides containing B/B pairs.

294858-26-7P 294858-28-9P 294858-30-3P 294858-32-5P 294858-33-6P 294858-34-7P 294858-62-1P

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(recognition of the minor groove of DNA by hairpin polyamides containing

 α -substituted- β -amino acids)

RN 294858-26-7 HCAPLUS

CN

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathring{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}\overset{\mathsf{U}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}{\overset{U}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}}{\overset{\mathsf{U}}}{\overset{\mathsf{U}}}}{\overset{$$

PAGE 1-C

__ (CH2)3_NMe2

PAGE 2-A

RN 294858-28-9 HCAPLUS

Absolute stereochemistry.

RN 294858-30-3 HCAPLUS

Absolute stereochemistry.

RN 294858-32-5 HCAPLUS

Absolute stereochemistry.

Page 45 of 495

RN 294858-33-6 HCAPLUS

Absolute stereochemistry.

Page 46 of 495

RN 294858-34-7 HCAPLUS

CN

H-Imidazole-2-carboxamide, N-[5-[[[4-[[5-[[[5-[[[3-[[3-[[3-[[3-[[disthylamino]propyl]amino]-3-oxopropyl]amino]-3-ly]amino]-amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[([25)-2-fluoro-3-[[[1-methyl-4-[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C

RN 294858-62-1 HCAPLUS

CN Ferrate(1-), [1-methyl-lH-imidazole-2-carbonyl-4-maino-1-methyl-lH-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[15-(carboxy-KO)-l1],14-bis[(carboxy-KO)methyl]-4-methyl-9-oxo-4,8,11,14-tetraazapentadec-1-yl]- β -alaninamidato(3-)]- (9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 3-B

PAGE 4-B

IT 294858-43-8 294858-45-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(recognition of the minor groove of DNA by hairpin polyamides containing $\alpha\text{-substituted-}\beta\text{-amino}$ acids)

RN 294858-43-8 HCAPLUS

CN β -Alanine, 4-amino-2,3,4,5-tetradehydro-1-methylproly1-4-

aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4

[4-[2-(methylamino)-2-oxoethyl]phenyl]methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$- \text{NH} - \text{CH}_2 - \text{CH$$

- RN 294858-45-0 HCAPLUS
- CN β-Alanine, 4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-methyl-1H-pyrrole-2-carbonyl-4-methyl-1

PAGE 1-B

PAGE 2-A

REFERENCE COUNT:

57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2009 ACS ON STN ACCESSION NUMBER: 1998:721676 HCAPLUS Full-text DOCUMENT NUMBER: 129:343723

ORIGINAL REFERENCE NO.: 129:70017a,70020a

TITLE: Preparation of DNA-binding pyrrole and imidazole

polyamide derivatives

INVENTOR(S): Dervan, Peter B.

PATENT ASSIGNEE(S): California Institute of Technology, USA

SOURCE: PCT Int. Appl., 243 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 13 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----WO 9849142 A1 19981105 WO 1998-US6997 19980408 <--W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 6090947 A 20000718 US 1996-607078 US 6143901 A 20001107 US 1997-837524 US 6635417 B1 20031021 US 1997-853522 WO 9850582 A1 19981112 WO 1997-US12722 19960226 <--19970421 <--19970508 <--19970721 <--W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 2286232 A1 19981105 CA 1998-2286232 19980408 <--AU 1998-71040 AU 9871040 Α 19981124 19980408 <--AU 747300 B2 20020516 EP 986539 A1 20000322 EP 1998-918047 19980408 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, T 20020521 JP 1998-547010 19980408 <-B1 20030114 US 1999-414611 19991008 <-B1 20030429 US 2001-921514 20010801 <-US 1997-43444P P 19970408 <-US 1997-43444P P 19970408 <-US 1997-42022P P 19970416 <-US 1997-837524 A2 19970508 <-US 1997-837524 A2 19970508 <-US 1997-837524 A2 19970508 <-US 1997-837524 P 19960801 <-US 1996-24374P P 19960801 <-US 1996-24374P P 19960801 <-US 1996-24374P P 19960801 <-US 1996-24374P P 19960801 <-US 1997-38384P P 19970220 <-US 1997-38384P P 19970220 <-US 1997-38384P P 19970220 <-US 1998-US6997 W 19980408 <-US 1999-414611 A1 19991008 <--IE, FI T JP 2002515063 US 6506906 PRIORITY APPLN. INFO.:

ED Entered STN: 13 Nov 1998 GΙ

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- Novel small mol. polyamides I [each R1, R5, R7, R8, R10 = independently H, C1, NO, Ac, PhCH2, C1-6 alkyl, C1-6 alkylamine, C1-6 alkyldiamine, C1-6 alkylcarboxylate, C1-6 alkenyl, C1-6 alkynyl; R2 = H, NH2, SH, C1, Br, F, Ac, CHO; each R3, R6, R9, R11 = independently H, NH2, OH, SH, Br, Cl, F, OMe, CH2OH, CH2SH, CH2NH2; R4 = NH(CH2)0-6NR12R13, NH(CH2)0-6CONH(CH2)0-6NR12R13, NHR12, NH(CH2)0-6CONHR12; R12, R13 = independently H, C1, NH, Ac, CH2Ph, C1-6 alkyl, C1-6 alkylamine, C1-6 alkyldiamine, C1-6 alkylcarboxylate, C1-6 alkenyl, C1-6-L; L = biotin, oligodeoxynucleotide, N-ethylnitrosourea, fluorescein, bromoacetamide, iodoacetamide, $DL-\alpha$ -lipoic acid, acridine, Ethyl Red, 4-(psoralen-8-yloxy) butyrate, tartaric acid, (+)- α -tocopheral, C1-6 alkynyl; each X-X4 = independently N, CH, C(OH), CMe, CNH2, CCl, CF; each a, c, e, h = independently 0-10; each b, d, f, q, i, m, n, p, q = independently 0-51 that specifically bind with subnanomolar affinity to any predetd. sequence in the human genome with potential use in mol. biol. and human medicine are described. Further, the designed compds. which target the minor groove of B-form double helical DNA offer a general approach for the control of gene-expression. Simple rules are disclosed which provide for rational control of the DNA-binding sequence specificity of synthetic polyamides containing N-methylpyrrole and N-methylimidazole amino acids. A series of mol. templates for polyamide design are disclosed which provide for small mols. which recognize predetd. DNA sequences with affinities and specificities comparable to sequence specific DNA-binding proteins such as transcription factors. Thus, designed polyamide II, prepared by solid-phase methods, showed recognition for oligonucleotide 5'-AACCAAGTCTTGGTA-3' with Ka = 4 + 108 M-1, and specificities of 11 and 19 for the match site vs. a center mismatch and an edge mismatch, resp.

IT 215438-30-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

RN 215438-30-5 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[5-[[13-[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-4-[[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1 (CA INDEX NAME)

PAGE 1-B

T 215437-62-0P 215437-65-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

RN 215437-62-0 HCAPLUS

PAGE 1-B

PAGE 1-C

PAGE 2-A

PAGE 3-A

RN 215437-65-3 HCAPLUS

Nickel, [glycyl-κN-glycyl-κN-L-histidyl-κN,κN3β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-βalaninamidato(2-)]- (9CI) (CA INDEX NAME)

PAGE 2-A

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:604905 HCAPLUS Full-text

DOCUMENT NUMBER: 129:226610

ORIGINAL REFERENCE NO.: 129:45969a,45972a

TITLE: Design and use of specific polyamide DNA-binding

 $\begin{array}{ccc} & \text{ligands for modulation of gene expression} \\ \text{INVENTOR(S):} & \text{Baird, Eldon E.; Dervan, Peter B.} \end{array}$

PATENT ASSIGNEE(S): California Institute of Technology, USA

SOURCE: PCT Int. Appl., 260 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 13 PATENT INFORMATION:

| F | PATENT NO. | | | | | | KIND DATE | | | APPLICATION NO. | | | | | | | | | | |
|-----------------|---------------|---------|-----|-----|-----|-----|-----------|------|----------------|-----------------|----------------|-----|------|--------------|------------|------------|-----|-----|--|--|
| - | | | | | | | | | | | | | | | | | | | | |
| Þ | | | | | | | | | WO 1998-US1714 | | | | | | | | | | | |
| | | W: | AL, | | | | | | | | | | | | | | | | | |
| | | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | GM, | GW, | HU, | ID, | IL, | IS, | JP, | KE, | KG, | | |
| | | | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | | |
| | | | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | | |
| | | | UA, | UG, | US, | UZ, | VN, | YU, | zw | | | | | | | | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | DE, | DK, | ES, | FI, | | |
| | | | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | BJ, | CF, | CG, | CI, | CM, | | |
| | | | GA, | GN, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | | | | |
| Ţ | JS | 6090 | | | A | | 2000 | 0718 | US 1996-607078 | | | | | | 19960226 < | | | | | |
| Ţ | JS | 6143 | | | A | | 2000 | 1107 | US 1997-837524 | | | | | | 19970421 < | | | | | |
| Į | JS | 6635417 | | | | В1 | 20031021 | | | US 1997-853522 | | | | | 19970508 < | | | | | |
| 0 | CA | 2281930 | | | | A1 | | 1998 | 0827 | CA 1998-2281930 | | | | | 19980129 < | | | | | |
| P | ΔU | 9862552 | | | | A | 19980909 | | | AU 1998-62552 | | | | | 19980129 < | | | | | |
| E | EΡ | 973740 | | | | A1 | 20000126 | | | EP 1998-904755 | | | | | 19980129 < | | | | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR. | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | | |
| | | | IE. | FI | | | | | | | | | | | | | · | | | |
| · · | JP 2002515897 | | | | | т | 20020528 | | | | JP 1998-536641 | | | | | 19980129 < | | | | |
| ī | US 7087378 | | | | B1 | | 2006 | 0808 | | US 1999-372474 | | | | 19990811 < | | | | | | |
| PRIORI | TY | APP | | | | | | | | | | | 6070 | | | | | 226 | | |
| IIS 1997-43444P | | | | | | | | | | | | | | P 19970408 < | | | | | | |

```
US 1997-42022P P 19970416 <--
US 1997-837524 A2 19970508 <--
US 1997-853522 A2 19970508 <--
US 1996-23309P P 19960731 <--
US 1996-24374P P 19960801 <--
US 1996-26713P P 19960801 <--
US 1997-38384P P 19970212 <--
US 1997-344444P P 19970210 <--
US 1997-44444P P 19970408 <--
US 1997-44444P P 19970721 <--
US 1998-US1714 W 19980129 <--
```

ED Entered STN: 24 Sep 1998

AB The invention encompasses improved selective polyamides for binding to specific nucleotide sequences of double stranded DNA as well as methods for designing and synthesizing polyamide DNA binding ligands that are selective for an identified specific nucleotide sequence. The 3-hydroxy-N-methylpyrrole/N-methylpyrrole carboxamide pair specifically recognizes the T.A base pair, while the N-methylpyrrole/3-hydroxy-N-methylpyrrole pair recognizes A.T nucleotide pairs. Similarly, an N-methylimidizole/N-methylpyrrole carboxamide pair specifically recognizes the G.C nucleotide pair, and the N-methylpyrrole/N-methylimidizole carboxamide pair recognizes the C.G nucleotide pair.

```
IT
    191916-00-4 193743-37-2 206128-30-5
    206128-31-6 211860-88-7 212180-64-8
    212181-15-2 212182-37-1 212182-38-2
    212182-39-3 212182-43-9 212182-45-1
    212182-46-2 212182-49-5 212182-50-8
    212182-51-9 212182-52-0 212182-57-5
    212182-58-6 212182-59-7 212182-61-1
    212182-62-2 212182-63-3 212182-65-5
    212182-66-6 212182-81-5 212446-79-2
    212446-80-5 212446-81-6 212446-82-7
    212446-83-8 212446-86-1 212446-87-2
    212446-88-3 212446-89-4 212446-90-7
    212446-93-0 212446-94-1 212446-95-2
    212447-03-5 212447-04-6 212447-06-8
    212447-07-9 212447-12-6 212447-13-7
    212447-14-8 212447-16-0 212447-17-1
    212447-18-2 212447-20-6 212447-21-7
    212447-37-5 212448-31-2 212448-32-3
    212448-34-5 212448-79-8 212448-80-1
    212448-86-7 212449-04-2 212449-05-3
    212449-07-5 212449-51-9 212449-52-0
    212449-56-4 212449-73-5 212449-74-6
    212449-76-8 212450-16-3 212450-17-4
    212450-23-2 212450-85-6 212450-86-7
    212450-87-8 212450-88-9 212450-90-3
    212450-91-4 212450-96-9 212450-97-0
    212451-00-8 212451-45-1 212451-46-2
    212451-52-0 212451-60-0 212451-61-1
    212451-62-2 212451-63-3 212451-66-6
    212451-67-7 212451-72-4 212451-73-5
    212451-75-7 212452-08-9 212452-15-8
    212452-39-6 212452-42-1 212452-43-2
    212452-44-3 212452-45-4 212452-46-5
    212452-49-8 212452-50-1 212452-51-2
    212452-52-3 212452-55-6 212452-56-7
    212452-57-8 212452-58-9 212452-67-0
    212452-68-1 212452-70-5 212452-71-6
    212452-72-7 212452-77-2 212452-78-3
```

```
212452-79-4 212452-81-8 212452-82-9
212452-83-0 212452-85-2 212452-86-3
212453-00-4 212453-01-5 212453-02-6
212453-07-1 212453-71-9 212453-72-0
212453-73-1 212453-74-2 212453-77-5
212453-78-6 212453-83-3 212453-84-4
212453-86-6 212454-35-8 212454-36-9
212454-42-7 212454-48-3 212454-49-4
212454-50-7 212454-51-8 212454-54-1
212454-55-2 212454-60-9 212454-61-0
212454-63-2 212454-93-8 212454-94-9
212454-98-3 212455-00-0 212455-01-1
212455-02-2 212455-05-5 212455-06-6
212455-07-7 212455-08-8 212455-09-9
212455-12-4 212455-13-5 212455-14-6
212455-15-7 212455-23-7 212455-24-8
212455-25-9 212455-27-1 212455-28-2
212455-33-9 212455-34-0 212455-35-1
212455-37-3 212455-38-4 212455-39-5
212455-41-9 212455-42-0 212455-60-2
212455-61-3 212455-62-4 212455-67-9
212482-74-1 212482-75-2 212482-76-3
212482-78-5 212482-79-6 212482-80-9
212482-82-1 212482-83-2 212482-84-3
212482-92-3 212482-93-4 212482-94-5
212482-96-7 212482-97-8 212482-98-9
212483-00-6 212483-01-7 212483-16-4
212483-25-5 212483-26-6 212483-27-7
212483-28-8 212483-29-9 212483-30-2
212483-31-3 212483-32-4 212483-33-5
212483-34-6 212483-35-7 212483-41-5
212483-42-6 212483-43-7 212483-44-8
212483-45-9 212483-46-0 212483-47-1
212483-48-2 212483-49-3 212483-52-8
212483-53-9 212483-54-0 212483-62-0
212483-64-2 212483-67-5 212483-69-7
212483-70-0 212483-72-2 212483-74-4
212483-77-7 212483-80-2 212483-82-4
212484-02-1 212484-03-2 212484-13-4
212484-15-6 212484-16-7
RL: BAC (Biological activity or effector, except adverse); BPR (Biological
process); BSU (Biological study, unclassified); THU (Therapeutic use);
BIOL (Biological study); PROC (Process); USES (Uses)
   (design and use of specific polyamide DNA-binding ligands for
   modulation of gene expression)
191916-00-4 HCAPLUS
1H-Imidazole-2-carboxamide, N-[2-[[[2-[[[4-[[5-[[[5-[[[5-[[[5-[[[3-[[3-
(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-
pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-
methyl-1H-pyrrol-3-vl]amino]carbonyl]-1-methyl-1H-pyrrol-3-vl]amino]-4-
oxobutyl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]carbonyl]-1-
methyl-1H-imidazol-4-yl]-1-methyl-4-[[(1-methyl-1H-imidazol-2-
vl)carbonvl]amino]- (CA INDEX NAME)
```

RN

Page 62 of 495

PAGE 1-A

PAGE 1-B

PAGE 1-C

- RN 193743-37-2 HCAPLUS
- CN 1H-Imidazole-2-carboxamide, N-[5-[[[4-[[2-[[[5-[[[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]carbonyl]-1methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-4oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-4-[[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2vl]carbonvl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

RN 206128-30-5 HCAPLUS

PAGE 1-A

PAGE 1-B

PAGE 2-A

- RN 206128-31-6 HCAPLUS
- CN IH-Imidazole-2-carboxamide, N-[5-[[5-[[4-[2-[[5-[[5-[[5-[[3-[[3-[[3-[disthylamino] propyl] amino]-3-oxopropyl] amino] carbonyl]-1-methyl-1Hpyrrol-3-yl] amino] carbonyl]-1-methyl-1H-pyrrol-3-yl] amino] carbonyl]-1methyl-1H-pyrrol-3-yl] amino] carbonyl]-1-methyl-1H-imidazol-4-yl] amino] -4oxobutyl] amino] carbonyl]-1-methyl-1H-pyrrol-3-yl] amino] carbonyl]-4-hydroxy1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-1H-imidazol-2yl] carbonyl] amino] (9C1)
 (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-B

- RN 211860-88-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{N}}{\mathsf{N}}_{\mathsf{He}}\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{Ne}}{\mathsf{U}}_-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{Ne}}{\mathsf{U}}_-$$

PAGE 1-C

__ (CH₂)3_NMe₂

PAGE 2-A

- RN 212180-64-8 HCAPLUS

PAGE 1-A

Me NH HO NH

HO NH

HO NH

Me NH

RN 212181-15-2 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[2-[[5-[[5-[[3-[[3-(dimethylamino)propy1]amino]-3-valpamino]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]-4-[[4-[[[4-[[[4-[[[3-hydroxy-1-methyl-4-[[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-[CA INDEX NAME)

PAGE 1-A

Page 69 of 495

PAGE 2-B

RN 212182-37-1 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl) - (9CI) (CA INDEX NAME)

PAGE 2-A

CN

RN 212182-38-2 HCAPLUS

PAGE 1-A

PAGE 2-A

RN

CN IH-Imidazole-2-carboxamide, N-[2-[[[5-[[14-[[5-[[15-[[15-[[15-[[13-[[13-[[3-[23-[24]]]]]]]]]]]]]]]) pppy]] amino]-3-oxopropy]] amino]carbony]]-1-methyl-1H-pyrrol-3-yl]amino]carbony]]-1-methyl-1H-pyrrol-3-yl]amino]carbony]]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbony]]-1-methyl-1H-pyrrol-3-yl]amino]carbony]]-1-methyl-1H-pyrrol-3-yl]amino]carbony]]-1-methyl-1H-pyrrol-2-yl]carbony]]-1-methyl-1H-jmidazol-4-yl]-4-[[(3-hydroxy-1-methyl-1H-pyrrol-2-yl)carbony]]-1-methyl-1H-[(CA-INDEN-IN

PAGE 1-B

PAGE 2-A

- RN 212182-43-9 HCAPLUS

amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-M-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

RN 212182-45-1 HCAPLUS

methyl-1H-pyrrol-2-yl)carbonyl]amino]-1-methyl-1H-imidazol-2yl]carbonyl]amino]-1-methyl- (CA INDEX NAME)

PAGE 1-A

$$\mathsf{Me}_2\mathsf{N} = (\mathsf{CH}_2) \, 3 - \mathsf{NH} - \mathsf{C} - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{NH} - \mathsf{Me}_{\mathsf{Me}} + \mathsf{M$$

PAGE 1-B

PAGE 1-C

RN 212182-46-2 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[5-[[[4-[[2-[[[5-[[[5-[[[5-[[[3-[[3-[dimethy.lamino] propyl] amino] -3-oxopropyl] amino] carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-4oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[[4-[[(3-hydroxy-1methyl-1H-pyrrol-2-yl)carbonyl] amino]-1-methyl-1H-imidazol-2yl]carbonyl]amino]-1-methyl- (CA INDEX NAME)

Page 74 of 495

- RN 212182-49-5 HCAPLUS

PAGE 1-A

Page 75 of 495

RN 212182-50-8 HCAPLUS

PAGE 1-A

RN 212182-51-9 HCAPLUS

PAGE 1-A

- RN 212182-52-0 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-3-(dimethyl-amino)propyl-1 (9CI) (CA INDEX NAME)

PAGE 1-B

RN 212182-57-5 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-

imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

- RN 212182-58-6 HCAPLUS

PAGE 2-A

RN 212182-59-7 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

- RN 212182-61-1 HCAPLUS

PAGE 1-B

- RN 212182-62-2 HCAPLUS
- CN 1H-Inidazole-2-carboxamide, N-[4-[[5-[[[5-[[[2-[[[5-[[3-[[3-[[d-[dithylamino] propyl] amino]-3-oxopopyl] amino] carbonyl]-1-methyl-1H-pyrrol-3-yl] amino] carbonyl]-1-methyl-1H-imidazol-4-yl] amino] carbonyl]-1-methyl-1H-pyrrol-3-yl] amino] carbonyl]-1-methyl-1H-pyrrol-3-yl] amino]-4-oxobutyl]-4-[[[4-[[[4-[[[d-1[[d-3-hydroxy-1-methyl-1H-pyrrol-2-yl] carbonyl] amino]-1-methyl-1H-pyrrol-2-yl] carbonyl] amino]-1-methyl-1H-imidazol-2-yl] carbonyl] amino]-1-methyl-1H-imidazol-2-yl] carbonyl] amino]-1-methyl-1 (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

- RN 212182-63-3 HCAPLUS
- CN IH-Imidazole-2-carboxamide, N-[5-[[[2-[[[5-[[3-[[3-[da-[dimethylamino]propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]carbonyl]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonylamino]-1-methyl-1H-pyrrol-2-yl]carbonylamino]-1-methyl-1H-pyrrol-2-yl]carbonylamino]-1-methy

PAGE 1-B

PAGE 2-B

RN 212182-65-5 HCAPLUS

CN

PAGE 1-B

PAGE 2-B

- RN 212182-66-6 HCAPLUS
- CN IH-Pyrrole-2-carboxamide, N-[4-[[5-[[5-[[5-[[5-[[3-[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]-4-oxobutyl]-3-hydroxy-4-[[[3-hydroxy-4-[[[3-hydroxy-4-[[3-hydroxy-1methyl-4-[[(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl- (CA INDEX NAME)

RN 212182-81-5 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[2-[[[5-[[5-[[3-[[3-[dimethylamino]propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]-4-[[4-[[4-[[[3-hydroxy-1-methyl-4-[[(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrol-2-yl]carbonyl]amino]-1-methyl-1-methyl-1H-pyrol-2-yl]carbonyl]amino]-1-methyl-1-me

PAGE 1-A

RN 212446-79-2 HCAPLUS

PAGE 3-A

PAGE 4-A

RN 212446-80-5 HCAPLUS

CN

PAGE 1-A

PAGE 2-A

RN 212446-81-6 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]-arbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[4-[[3-hydroxy-4-[[3-hydroxy-1-methyl-4-[-[(1-methyl-4-[-[(1-methyl-4-[-(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl

RN 212446-82-7 HCAPLUS

CN

| HE_Imidazole-2-carboxamide, N- [5-[[[3-[[3-(dimethylamino]propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[4-[[[3-hydroxy-4-[[4-[[[3-hydroxy-1-methyl-4-[[3-[[1-methyl-4-[[13-([1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-m

- RN 212446-83-8 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-midiazole-2-carbonyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonylβ-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-B

- RN 212446-86-1 HCAPLUS
- CN 1H-Imidazole-2-carboxamide, N-[5-[[3-[[3-([dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[3-hydroxy-4-[[[4-[[3-hydroxy-1-methyl-4-[[1]-methyl-4-[(1-methyl-4-[1]-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1-oxoputyl]amino]-1-oxoputyl]amino]-1-oxoputyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-methyl-1-M-pyrol-2-yl]carbonyl]amino]-1-methyl-1-M-pyr

PAGE 3-A

PAGE 4-A

- RN 212446-87-2 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidaZole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidaZole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidaZole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-\operatorname{CH}_2 - \operatorname{CH}_2 - \overset{\circ}{\operatorname{U}}_- \operatorname{NH} - \overset{\circ}{\operatorname{U}}_- \overset{\circ}{\operatorname{NH}} - \overset{\circ}{\operatorname{U}}_- \overset{\circ}{\operatorname{NH}} - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_2 - \overset{\circ}{\operatorname{U}}_1 - \overset{\circ}{\operatorname{U}}_1$$

PAGE 1-C

__ (CH₂)3_NMe₂

PAGE 2-A

- RN 212446-88-3 HCAPLUS

PAGE 1-A

- RN 212446-89-4 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-9-l(QCI) (CA INDEX NAME)

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\circ}{\mathsf{NH}}-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{NH}}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{NH}}{\mathsf{U}}-\overset{\mathsf{NH}}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{NH}}{\mathsf{U}}-\overset{\mathsf{NH}}-\overset{\mathsf{NH}}{\mathsf{U}}-\overset{\mathsf{NH}}{\mathsf{U}}-\overset{\mathsf{NH}}-\overset{\mathsf{NH}}-\overset{\mathsf$$

PAGE 1-C

- RN 212446-90-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

PAGE 1-C

$$\begin{array}{c} - \text{CH}_2 - \text{C} - \text{NH} - \text{(CH}_2) \text{ 3} - \text{NMe}_2 \\ \downarrow \downarrow \end{array}$$

PAGE 2-A

- RN 212446-93-0 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-βalanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-(9CI) (CA INDEX NAME)

PAGE 1-A

RN 212446-94-1 HCAPLUS

PAGE 1-B

PAGE 1-C

- RN 212446-95-2 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-N-[3-(dimethylamino)propyl) [9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

RN 212447-03-5 HCAPLUS

PAGE 3-A

PAGE 4-A

RN 212447-04-6 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino)propyl]amino]-3oxpropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[4-[[3-hydroxy-4-[4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1]-methyl-4-[1]-methyl-4-[1]-methyl-4-[1]-methyl-1]-midazol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1 (CA INDEX NAME)

RN 212447-06-8 HCAPLUS CN 1H-Imidazole-2-carbo

1H-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino]propyl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[3-(hydroxy-4[[4-[[4-[[4-([3-hydroxy-1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[[1-methyl-4-]]-2-yl]carbonyl]amino]-1H-pyrrol-2yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl- (CA INDEX NAME)

PAGE 1-A

RN 212447-07-9 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[[3-[3-[dimethylamino]propyl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[3-hydroxy-4[[3-hydroxy-1-methyl-4-[[4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1]-methyl-4-]]amino]-1-H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1Hpyrrol-2-yl]carbonyl]amino]-1-methyl- (CA INDEX NAME)

$$-\operatorname{CH}_2 - \operatorname{CH}_2 - \overset{\circ}{\operatorname{U}} - \operatorname{NH} - \overset{\circ}{\operatorname{U}} -$$

PAGE 1-C

__ (CH2)3_NMe2

- RN 212447-12-6 HCAPLUS
- CN IR-Imidazole-2-carboxamide, N-[5-[[5-[[4-[5-[[4-[5-[[3-[[2-[[5-[[3-[[3-[3-[2-[15-[13-[2-[15-[13-[2-[15-[13-[2-[15-[13-[2-[15-[13-[2-15-[

PAGE 1-A

PAGE 2-A

RN 212447-13-7 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[5-[[4-[5-[[5-[[3-[2-[[5-[[3-[3-[3-[4-[dimethyl-amino)propyl]amino]-3-oxopropyl]amino]-amethyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-jyrrol-3-yl]amino]carbonyl]-1-methyl-1H-jyrrol-3-yl]amino]carbonyl]-1-methyl-1H-jyrrol-3-yl]amino]-(CA INDEX NAME)

PAGE 1-A

- RN 212447-14-8 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-jyrrole-2-carbonyl-pyrrole-2-carbonyl-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)propyl]- (9CI) (CA INDEX NAME)

Page 116 of 495

PAGE 2-B

RN 212447-16-0 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-13-(dimethyl-1mino)propyl)- (9CI) (CA INDEX NAME)

- RN 212447-17-1 HCAPLUS
- CN B-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-B-alanyl-4-amino1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-butuanoyl-4-amino-3-hydroxy-1methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2carbonyl-B-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

RN 212447-18-2 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-βalanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-N-13-(dimethylamino)propyl)-9(51) (CA INDEX NAME)

PAGE 1-C

- RN 212447-20-6 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-1-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-13 (GA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 212447-21-7 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

$$-\mathrm{NH} - \mathrm{UH} - \mathrm{CH}_2 - \mathrm{CH}_2 - \mathrm{UH} - \mathrm{NH} - \mathrm{UH} -$$

PAGE 1-C

Page 122 of 495

- RN 212447-37-5 HCAPLUS

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{2N-} \\ \text{(CH}_2) \\ \text{3-NH-C-CH}_2 \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{NH-} \\ \text{Me} \end{array}$$

- RN 212448-31-2 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-3-hydroxy1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
 (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 212448-32-3 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-3-hydroxy1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA
INDEX NAME)

PAGE 1-C

- (CH2)3-NMe2

PAGE 2-A

- RN 212448-34-5 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-yrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-(grading-thyl-1H-yrole-2-carbonyl-1-(grading-thyl-1H-yrole-2-carbonyl-1)(grading-thyl-1-(grading-thyl-1)(grading

PAGE 1-A

$$\texttt{Me2N-}(\texttt{CH2}) \ 3 - \texttt{NH-} \overset{\text{0}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}}{\overset{\text{$0}}{\overset{\text{$0}}}{\overset$$

PAGE 1-B

PAGE 2-B

НО_____

Me____

PAGE 2-C

CN lH-Imidazole-2-carboxamide, N-[5-[[2-[[3-[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Himidazol-4-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[4-[[4-[[3-([3-hydroxy-4-[[4-([3-([3-hydroxy-1-methyl-4-[(1-methyl-1H-pyrrol-2-yl)carbonyl]amino]-1-oxpropyl]amino]-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1 (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

Me

NH

Me

NH

C-NH-CH2-CH2-C-NH-(CH2)3-NMe2

CN IH-Imidazole-2-carboxamide, N-[5-[[[2-[[[3-[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Himidazol-4-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[[3-hydroxy-4-[[4-[[[4-[[[3-hydroxy-1-methyl-4-[[(1-methyl-1H-pyrrol-2-y])carbonyl]amino]-1-oxopropyl]amino]-1-

N 212448-80-1 HCAPLUS

methyl-lH-imidazol-2-yl]carbonyl]amino]-l-methyl-lH-pyrrol-2yl]carbonyl]amino]-l-oxobutyl]amino]-l-methyl-lH-pyrrol-2yl]carbonyl]amino]-l-oxopropyl]amino]-l-methyl- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 212448-86-7 HCAPLUS

CN

β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA NDEX NAME)

PAGE 1-C

- RN 212449-04-2 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methyl-prolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-N-[3-(dimethyl-amino)propyl]- (9CI)
 (CA INDEX NAME)

PAGE 1-C

- (CH2)3-NMe2

- RN 212449-05-3 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-13-(dimethyl-1H-pyrole-2

PAGE 1-C

- (CH2)3-NMe2

- RN 212449-07-5 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonylB-alanyl-4-amino-3-hydroxyl-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA
 INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

- (CH2)3-NMe2

- RN 212449-51-9 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-1-(CA INDEX NAME)

PAGE 1-B
$$-\stackrel{\circ}{\mathbb{H}}_{\rm NH-CH2-CH2}\stackrel{\circ}{\mathbb{H}_{\rm 2}}\stackrel{\circ}{\mathbb{H}_{\rm 2}}\stackrel{\circ}{\mathbb{H}_{\rm 1}}\stackrel{\circ}{\mathbb{H}_{\rm 2}}\stackrel{\circ}{\mathbb{H}_{\rm 2}}\stackrel{\circ}{\mathbb{H}$$

PAGE 1-C

PAGE 2-A

RN 212449-52-0 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methyl-rolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

- RN 212449-56-4 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1methyl-1H-imidazole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-3-hydroxyl-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA
 INDEX NAME)

PAGE 1-A

PAGE 1-C

- RN 212449-73-5 HCAPLUS
- $\begin{array}{ll} \text{CN} & \beta\text{-}Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-}\beta\text{-}alanyl-4-amino-1-methyl-1H-imidazole-2-} \end{array}$

carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-butanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

RN 212449-74-6 HCAPLUS

PAGE 1-C

__ (CH2)3 _ NMe2

PAGE 2-A

PAGE 1-B

- RN 212449-76-8 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylproly1-4-amino-1-methyl1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonylβ-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-N-[3-dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

- (CH2)3-NMe2

PAGE 2-A

- RN 212450-16-3 HCAPLUS
- CN B-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA
 INDEX NAME)

PAGE 1-A

Page 142 of 495

- RN 212450-17-4 HCAPLUS
- CN B-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1methyl-1H-imidazole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA
 INDEX NAME)

PAGE 1-C

- RN 212450-23-2 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl
 1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-to-1
 methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-N-[3-dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

- RN 212450-85-6 HCAPLUS
- CN 1H-Imidazole-2-carboxamide, N-[5-[[[4-[[5-[[5-[[5-[[15-[[15-[[13-[[3-[4-hylamino] propyl]amino] -3-oxopropyl]amino] carbonyl] -4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino] carbonyl]-1-methyl-1H-pyrrol-3-yl]amino] carbonyl]-1-methyl-1H-pyrrol-3-

yl]amino|carbonyl]-1-methyl-1H-pyrrol-3-yl]amino|carbonyl]-1-methyl-1Hpyrrol-3-yl]amino|carbonyl]-1-methyl-1H-pyrrol-3-yl]amino|-4oxobutyl]amino|carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[3hydroxy-1-methyl-4-[[(1-methyl-1H-pyrrol-2-yl)carbonyl]amino|-1H-pyrrol-2yl]carbonyl]amino|-1-oxopropyl]amino|-1-methyl- (CA INDEX NAME)

PAGE 1-B

$$- \text{NH} \underbrace{ \underbrace{ \underbrace{ \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{Me}} } }_{\text{Ne}} \underbrace{ \underbrace{ \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{Me}} }_{\text{Ne}} \underbrace{ \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{Ne}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{Ne}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \text{NH} - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH} - \text{CH}_2 } }_{\text{NH}} \underbrace{ \text{NH}_2 - \text{CH}_2 - \underbrace{ \text{C}_{1} \text{NH}_2 } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{CH}_2 - \text{C}_{1} } }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{C}_{1} }_{\text{NH}} \underbrace{ \text{NH}_2 - \text{C}_{1} }_{\text{NH}} \underbrace{ \underbrace{ \text{NH}_2 - \text{C}_{1}$$

RN 212450-86-7 HCAPLUS

LH2

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH} -\overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH} -\overset{\mathsf{Me}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}$$

PAGE 1-C

__ (CH2)3_NMe2

PAGE 1-A

RN 212450-87-8 HCAPLUS

CN lH-Imidazole-2-carboxamide, N-[5-[[4-[[5-[[5-[[5-[[5-[[5-[[3-[[3-[[3-[dinethylamino]propy]]amino]-3-oxopropy]]lamino]carbonyl]-4-hydroxy-1methyl-1H-pyrrol-3-yl]amino[carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-methyl-1H-pyrrol-3-yl]amino]-4oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[3-hydroxy-1methyl-4-[[(1-methyl-1H-pyrrol-2-yl)carbonyl]amino]-1-hypyrrol-2yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl- (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

RN 212450-88-9 HCAPLUS

PAGE 1-A

PAGE 1-B

$$-\operatorname{CH}_2-\operatorname{CH}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\operatorname{CH}_2-\overset{\circ}{\operatorname{CH}}_2-\overset{\circ}{\operatorname{CH}}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-$$

PAGE 1-C

__ (CH₂)3_NMe₂

- RN 212450-90-3 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylproly1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)]

PAGE 1-C

RN 212450-91-4 HCAPLUS

PAGE 1-C

__ (CH2)3_NMe2

PAGE 2-A

RN 212450-96-9 HCAPLUS

- RN 212450-97-0 HCAPLUS

PAGE 1-B

PAGE 1-C

- RN 212451-00-8 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-3-hydroxyl-methyl-1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-aminol-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

- RN 212451-45-1 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-(9CI) (CA INDEX NAME)

$$-\text{NH}-\text{CH}_2-\text{CH}_2-\overset{\text{\tiny 0}}{\text{\tiny 0}}-\text{NH}-\overset{\text{\tiny 0}}{\text{\tiny 1}}-\overset{\text{\tiny 0}}{\text{\tiny 1}}-\text{NH}-\overset{\text{\tiny 0}}{\text{\tiny 1}}-\overset{\text{\tiny 0}}{\text{\tiny 1}}-\text{NH}-\overset{\text{\tiny 1}}{\text{\tiny 1}}-\overset{\text{\tiny 0}}{\text{\tiny 1}}-\overset{\text{\tiny 1}}{\text{\tiny 1}}-\overset{\tiny 1}}-\overset{\text{\tiny 1}}{\text{\tiny 1}}-\overset{\text{\tiny 1}}-\overset{\text{\tiny 1}}{\text{\tiny 1}}-\overset$$

- RN 212451-46-2 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylproly1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-β-alany1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-aminobutanoy1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-B-alany1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-1-methyl-1-H-pyrrole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-N-[3-(dimethylamino)propy1]- (9CI) (CA INDEX NAME)

$$- \text{ }_{\text{HH}} - \text{ }_{\text{CH}} \text{ }_{2} - \text{ }_{\text{CH}} \text{ }_{2} - \text{ }_{\text{HH}} \text{ }_{\text{NH}} \text{ }_{\text{NH}} \text{ }_{\text{HH}} \text{$$

PAGE 1-C

$$\begin{array}{c} --\text{CH}_2-\text{CH}_2-\text{C}-\text{NH}-\text{(CH}_2)} \text{ 3}-\text{NMe}_2 \\ \downarrow \\ \end{array}$$

RN 212451-52-0 HCAPLUS

CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylproly1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-β-alany1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-N-[3-(dimethylamino)propy1]- (9CI) (CA INDEX NAME)

PAGE 1-C

RN 212451-60-0 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[5-[[[4-[[5-[[[5-[[[5-[[[5-[[3-[[3-(dimethylamino]propyl]amino]-acxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[3-[[1-methyl-4-[[(1-methyl-1H-pyrrol-2-yl)carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]amino]-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]amino]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]carbonyl]-1-kpyrol-2-yl]-1-kpyrol-2-yl]-1-kp

vl]carbonvl]amino]-1-oxopropvl]amino]- (CA INDEX NAME)

$$-CH_2-CH_2- \overset{\overset{\circ}{U}}{\overset{\circ}{U}}-NH - \overset{\overset{\circ}{U}}{\overset{\circ}{U}}-NH - \overset{\overset{\circ}{U}}{\overset{\circ}{U}}-NH - \overset{\overset{\circ}{U}}{\overset{\circ}{U}}-NH - CH_2-CH_2- \overset{\circ}{U}-NH - CH_2- \overset{\circ}{U}-NH - CH_2$$

PAGE 1-C

- RN 212451-62-2 HCAPLUS
- CN IH-Imidazole-2-carboxamide, N=[5-[[4-[[5-[[5-[[5-[[5-[[5-[[5-[[5-[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1methyl-IH-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-IH-pyrrol-3-yl]amino]carbonyl]-1-methyl-IH-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-IH-pyrrol-3-yl]amino]carbonyl]-4-pyroxy-1-methyl-IH-pyrrol-3-yl]amino]carbonyl]-1-methyl-IH-pyrrol-3-yl]-1-methyl-4-[[3-[[1-methyl-4-[1-2-yl]carbonyl]amino]-1-k-pyrrol-2-yl]carbonyl]amino]-1-k-pyrrol-2-yl]carbonyl]amino]-1-xpyrol-2-yl]carbonyl]amino]-1-xpyrol-2-yl]carbonyl]amino]-1-xpyrol-2-yl]carbonylamino]-1-xpyrol-2-yl]ca

Me

PAGE 1-A

PAGE 1-C

RN 212451-63-3 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[[4-[[5-[[[3-[[3-[[5-[[[3-[[3-[(3-[[3-[dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-4-[[(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-H-pyrrol-2-yl]carbonyl]amino]-1-methyl-4-[[(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1-([(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1-([(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1-([(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-0-oxopropyl]amino]-1-methyl-1-1-0-oxopropyl]amino]-1-methyl-1-1-0-oxopropyl]amino]-1-methyl-1-1-0-oxopropyl]amino]-1-0-oxopropyl]amino]-1-0-0xopropyl]amino]-1-0xopropyl]amin

PAGE 1-C

__ (CH2)3_NMe2

- RN 212451-66-6 HCAPLUS
- CN [A-Alaninamide, 2,3,4,5-tetradehydro-1-methyl-proly1-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-poyl-] (9C1) (CA INDEX NAME)

PAGE 1-C

RN 212451-67-7 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl
1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonylβ-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 1-C

__ (CH2)3_NMe2

RN 212451-72-4 HCAPLUS

PAGE 2-A

RN 212451-73-5 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[4-[[5-[[5-[[5-[[5-[[5-[[5-[[3-[[3-(dimethylamino)propy]]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-4-[[1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-cxporpyl]amino]-(CA INDEX NAME)

Me IIII

PAGE 1-B

PAGE 1-A

PAGE 1-C

RN 212451-75-7 HCAPLUS

- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N[3-(dimethylamino)propyl] (9CI) (C NIDEX NAME)

PAGE 1-C

$$\begin{array}{c} - \text{CH}_2 - \text{C}_- \text{NH} - \text{(CH}_2) \text{ 3} - \text{NMe}_2 \\ \\ \end{array}$$

PAGE 2-A

RN 212452-08-9 HCAPLUS

CN β-Alaninamide, 2,3 4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1 H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-(9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

PAGE 2-A

RN 212452-15-8 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl)-(9CI)

PAGE 1-C

RN 212452-39-6 HCAPLUS

PAGE 1-C

RN 212452-42-1 HCAPLUS

N H-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino)propyl]amino]-3oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[4[[4-[[4-[[13-hydroxy-4-[[[3-hydroxy-1-methyl-1-H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1CA INDEX NAMEY

PAGE 1-A

- RN 212452-43-2 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 212452-44-3 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino)propyl]amino]-3oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[4[[3-hydroxy-4-[[3-[[1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H

PAGE 1-A

RN 212452-45-4 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino]propyl]amino]-3oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[4-[[[3-hydroxy-1-methyl-4-[[3-[[[1-methyl-4-[[1]-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1h-pyrrol-2-yl]carbonyl]amino]-1oxopropyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-oxobutyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1oxopropyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{D}}{\mathsf{U}}_{-}\mathsf{NH} -\overset{\mathsf{N}}{\mathsf{U}}_{-}\overset{\mathsf{D}}{\mathsf{NH}} -\overset{\mathsf{M}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{NH} -\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{U}_{-}\mathsf{NH} -\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf{U}_{-}\mathsf$$

PAGE 1-C

__ (CH₂)3_NMe₂

- RN 212452-46-5 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylproly1-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-inidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-3-(CA INDEX NAME)

PAGE 1-A

Me NH - U (CH2) 3-NH - U (CH2) 3-NH - U NH - U N

RN 212452-49-8 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[3-hydroxy-4-[[(4-[[3-hydroxy-4-[[(4-[[3-hydroxy-4-[[(4-[[3-hydroxy-4-[[(4-[13-hydroxy-4-[[(1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonyl]amino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonyl]amino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonyl]amino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonyl]amino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonyl]amino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1CA-Dyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl]carbonylamino]-1-methyl-1D-pyrol-2-yl

PAGE 1-A

PAGE 3-A

PAGE 4-A

RN 212452-50-1 HCAPLUS

CN

INTERIOR OF THE PROPRIES OF TH

- RN 212452-51-2 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1 H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-6-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

- RN 212452-52-3 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonylB-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

- RN 212452-55-6 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-3-alanyl-3-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH}-\overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH}-\overset{\mathsf{Me}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_$$

- RN 212452-56-7 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-3-amino-1-methyl-1H-pyrrole-2-carbonyl-3-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-(QX INDEX NAME)

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}{\overset{\mathsf{N}}}}{\overset{\mathsf{N}}}}{\overset$$

PAGE 1-C

- RN 212452-57-8 HCAPLUS
- CN IH-Imidazole-2-carboxamide, N-[4-[[5-[[[5-[[[5-[[[5-[[3-[[3-(
 dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-4-[[(1-methyl-4-[[3-[[1-methyl-4-[[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[[1-methyl-4-[3-[]2-y]]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-(CA INDEX NAME)

Serial No.:10/570,159

PAGE 1-A

PAGE 1-B

- RN 212452-58-9 HCAPLUS

PAGE 1-A

PAGE 1-B

$$-\operatorname{CH}_2-\operatorname{CH}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{CH}}_2-\overset{\circ}{\operatorname{CH}}_2-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_2-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_2-$$

PAGE 1-C

__ (CH₂)3_NMe₂

RN 212452-67-0 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino]propyl]amino]-3oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[4[[4-[[4-[[4]-hydroxy-4-[[[3-hydroxy-1-methyl-4-[[[1-methyl-4-[[[1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2yl]carbonyl]amino]-H-pyrrol-2-yl]carbonyl]amino]-H-pyrrol-2yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrr

PAGE 1-A

PAGE 4-A

RN 212452-68-1 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[[3-[[3-[dimethylamino]propy1]amino]-3-oxopropy1]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[4-[[3-hydroxy-4-[[4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1]-hydroxy-1-methyl-4-[[1-methyl-4-[[1-methyl-4-[]]-drbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-coxobutyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-coxopropyl]amino]-1-methyl-1Carbonyl]amino]-1-coxopropyl]amino]-1-methyl-1Carbonyl]amino]-1-coxopropyl]amino]-1-methyl-1Carbonyl]amino]-1-coxopropyl]amino]-1-methyl-1Carbonyl]amino]-1-coxopropyl]amino]-1-methyl-1Carbonyl]amino]-1-methyl-1Carbonyl]amino]-1-methyl-1Carbonyl]amino]-1-methyl-1Carbonyl]amino]-1-methyl-1Carbonyl]amino]-1-methyl-1Carbonyl-1-methyl-

PAGE 1-A

RN 212452-70-5 HCAPLUS

NH-Imidazole-2-carboxamide, N-[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[3-k]]]]-yl]-4-[[4-[[3-k]]]-yl]-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1-me

$$-\operatorname{CH}_2-\operatorname{CH}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_2-\overset{\circ}{\operatorname{U}}_-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_2-\overset{\circ}{\operatorname{U}}_2-\overset{\circ}{\operatorname{U}}_1-$$

PAGE 1-C

__ (CH₂)3_NMe₂

- RN 212452-71-6 HCAPLUS
- CN [B-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1 1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

Page 200 of 495

PAGE 1-C

__ (CH2)3_NMe2

PAGE 2-A

RN 212452-72-7 HCAPLUS

CN lH-Imidazole-2-carboxamide, N-[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[3-k]]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[[3-k]]-4-[3-k]]-4-[3-k]-

Page 201 of 495

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH} -\overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH} -\overset{\mathsf{Me}}{\overset{\circ}{\mathsf{U}}}-\mathsf{NH} -\mathsf{CH}_2-\mathsf{CH}_2-\overset{\mathsf{C}}{\mathsf{U}}-\mathsf{NH} -\overset{\mathsf{NH}}{\overset{\circ}{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{NH}}{\overset{\mathsf{U}}}-\overset{\mathsf{U}}-\overset{\mathsf{U}}{\overset{\mathsf{U}}}-\overset{\mathsf{U}$$

PAGE 1-C

__ (CH₂)3_NMe₂

- RN 212452-77-2 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylprolyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)provyl-| 9(SI) (CA INDEX NAME)

Serial No.:10/570,159

- RN 212452-78-3 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-1-methylproly1-B-alany1-4amino-1-methyl-1H-imidazole-2-carbony1-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1Hpyrrole-2-carbony1-B-alany1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-N-1B-1-hydroxy-1-methyl-1H-pyrrole-2-carbony1-N-[3(dimethylamino)9-poyy1]- (9C1) (CA INDEX NAME)

Serial No.:10/570,159

- RN 212452-79-4 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylprolyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-h-[3-(dimethylamino) propyl] = (9CI) (CA INDEX NAME)

RN 212452-81-8 HCAPLUS

CN \$\textit{B}\$-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylproly1-\$\textit{B}\$-alany1-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-\$\textit{B}\$-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

Serial No.:10/570,159

- RN 212452-82-9 HCAPLUS

- RN 212452-83-0 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-β-alanyl-4amino-1-methyl-1H-mindazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-aminobutanoyl-4-aminol-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

- RN 212452-85-2 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylproly1-β-alany1-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-3-amino-3-methyl-1H-midazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1H-imidazole-2-carbonyl-4-amino)-1-methyl-1H-pyrole-2-carbonyl-N-[3-(dimethyl-1H-imidazole-2-carbonyl-1-4-amino)-1-methyl-1H-pyrole-2-carbonyl-N-[3-(dimethyl-1H-imidazole-2-carbonyl-1-4-amino)-1-methyl-1H-imidazole-2-carbonyl-N-1-1-methyl-1-4-amino-1-methyl-1H-imidazole-2-carbonyl-N-1-3-mino-1-methyl-1-4-amino-1-methyl-1-1H-imidazole-2-carbonyl-N-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-1-methyl-1-methyl-1-methyl-1-met

PAGE 1-B

$$-11H \underbrace{ \begin{array}{c} \overset{\circ}{\mathbb{Q}} \\ \\ \\ \end{array}}_{\text{Ne}} 11H - CH_2 - CH_2 - \underbrace{\overset{\circ}{\mathbb{Q}} \\ \\ \\ \end{array}}_{\text{NH}} 11H \underbrace{ \begin{array}{c} \overset{\circ}{\mathbb{Q}} \\ \\ \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\circ}{\mathbb{Q}} \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\overset{\circ}{\mathbb{Q}} \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\circ}{\mathbb{Q}} \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\overset{}}{\mathbb{Q}} \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\overset{\circ}{\mathbb{Q}} \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\overset{\circ}{\mathbb{Q}} \\ \end{array}}_{\text{Ne}} 11H \underbrace{ \begin{array}{c} \overset{\overset{\circ}{\mathbb{Q}} \\ \end{array}}_{$$

- RN 212452-86-3 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-1-methylproly1-β-alany1-4amino-1-methyl-1H-imidazole-2-carbony1-4-amino-1-methyl-1H-imidazole-2carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2carbony1-β-alany1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-3hydroxy-1-methyl-1H-pyrrole-2-carbony1-N-[3-(dimethyl-iH-imid-2-carbony1-4-amino)]
 (CA INDEX NAME)

$$-11H - \frac{1}{100} - 11H - CH_2 - CH_2 - \frac{1}{100} - 11H - \frac{1}{100} - \frac{1}{10$$

PAGE 1-C

PAGE 2-A

RN 212453-00-4 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N=[2-[[[5-[[3-[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-Imidazol-4-yl]-4-[[3-[[[4-[[4-[[3-hydroxy-1-methyl-4-[[(1-methyl-4-[[3-[[1-methyl-4-[(1-methyl-4-[[1-methyl-4-[](1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-oxoputyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxoputyl]amino]-1-methyl- (CA INDEX NAME)

Serial No.:10/570,159

RN 212453-01-5 HCAPLUS

PAGE 1-B

RN 212453-02-6 HCAPLUS

PAGE 1-A

PAGE 1-B

CN | B-Alaninamide, 2, 3, 4, 5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

RN 212453-71-9 HCAPLUS

PAGE 2-B

O

N

Me

O

CH2

CH2

CH2

CH2

OH

PAGE 3-B

Me N OF

RN 212453-72-0 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 212453-73-1 HCAPLUS

PAGE 1-C

PAGE 2-A

$$\bigcup_{N} C-NH-CH_2-CH_2-\bigcup_{N} C$$

RN 212453-74-2 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[5-[[4-[[5-[[[5-[[5-[[3-[[3-[[3-[[3-[dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methylHP-pyrrol-3-yl]-4-[[3-[[3-hydroxy-4-[[(3-hydroxy-1-methyl-1H-pyrrol-2-yl]amino]-1-methylyl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1oxopropyl]amino]-1-methyl- (CA INDEX NAME)

PAGE 1-B

$$-\operatorname{CH}_2-\operatorname{CH}_2-\overset{\overset{\circ}{\mathsf{U}}_-}{\operatorname{NH}}-\overset{\overset{\circ}{\mathsf{NH}}_-}{\operatorname{NH}}-\overset{\overset{\circ}{\mathsf{U}}_-}{\operatorname{NH}}-\overset{\mathsf{NH}_-}{\operatorname{U}}-\overset{$$

PAGE 1-C

__ (CH2)3_NMe2

- RN 212453-77-5 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-jyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-3-methyl-1H-pyrrole-2-carbonyl-3-methyl-1H-pyrrole-2-carbonyl-3-methyl-1H-pyrrole-2-carbonyl-3-methyl-1H-pyrrole-2-carbonyl-3-methyl-1H-pyrrole-2-carbonyl-3-methyl-1H-pyrrole-2-carbonyl-3-methyl-1-meth

Page 222 of 495

PAGE 1-C

- RN 212453-78-6 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-(3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-B

НО_____

Me____

PAGE 2-C

PAGE 1-B

PAGE 2-A

Page 225 of 495

RN 212453-84-4 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-15-[[[4-[[5-[[5-[[5-[[5-[[3-[[3-([3-([dimethylamino)propy1]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-pytrol-3-yl]amino]carbonyl]-4-pytrol-3-yl]amino]carbonyl]-4-pytrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-pytlamino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-pytrol-3-yl]amino]-4-pytrol-3-yl]amino]-1-methyl-1H-pytrol-3-yl]amino]-1-methyl-1H-pytrol-2-yl]carbonyl]amino]-1-methyl-1H-pytrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1H-pytrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1CA INDEX NAME)

PAGE 1-C

 $\bigcup_{\mathbb{N}} \mathbb{C}^{-\mathbb{N}\mathbb{H} - \mathbb{C}\mathbb{H}_2 - \mathbb{C}\mathbb{H}_2 - \bigcup_{\mathbb{N}}}$

PAGE 2-A

- RN 212453-86-6 HCAPLUS

PAGE 1-B

$$-\underbrace{\mathbb{I}_{-\mathrm{NH}}}_{\mathrm{NH}}\underbrace{-\underbrace{\mathbb{I}_{-\mathrm{NH}}}_{\mathrm{NH}}}_{\mathrm{NH}}\underbrace{-\underbrace{\mathbb{I}_{-\mathrm{NH}}}_{\mathrm{NH}}}_{\mathrm{NH}}\underbrace{-\underbrace{\mathbb{I}_{-\mathrm{NH}}}_{\mathrm{NH}}}_{\mathrm{NH}}\underbrace{-\underbrace{\mathbb{I}_{-\mathrm{NH}}}_{\mathrm{NH}}}_{\mathrm{C-NH}}$$

- RN 212454-35-8 HCAPLUS
- CN B-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylproly1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-B-alany1-4-amino-1-methyl-1H-imidazole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-4-aminobutanoy1-4-amino-1-methyl-1H-pyrrole-2-carbony1-B-alany1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1H-pyrrole-2-carbony1-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 212454-36-9 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-(9CI) (CA INDEX NAME)

PAGE 1-A

- RN 212454-42-7 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl)-9(SI) (CA INDEX NAME)

$$-\overset{\circ}{\mathbb{L}}_{\mathrm{NH-CH}_{2}-\mathrm{CH}_{2}}\overset{\circ}{\mathbb{L}}_{\mathrm{NH}}$$

PAGE 1-C

- RN 212454-48-3 HCAPLUS
- CN lH-Imidazole-2-carboxamide, N-[5-[[4-[[5-[[[5-[[[5-[[[5-[[[5-[[[3-[[3-([dimethylamino] prop1] amino] -3-oxopropyl] amino] carbonyl] -1-methyl-1H-pyrrol-3-yl] amino] carbonyl] -1-methyl-1H-pyrrol-3-yl] amino] carbonyl] -1-methyl-1H-pyrrol-3-yl] amino] carbonyl] -1-methyl-1H-pyrrol-3-yl] amino] carbonyl] -4-hydroxy-1-methyl-1H-pyrrol-3-yl] amino] -4-oxobutyl] amino] carbonyl] -4-hydroxy-1-methyl-1H-pyrrol-3-yl] -1-methyl-1H-pyrrol-3-yl] -1-methyl-1H-pyrrol-2-yl] carbonyl] amino] -1-oxopropyl] amino] -1-oxopropyl] amino] -1-methyl-1H-pyrol-2-yl] carbonyl] -1-methyl-1H-pyrol-2-yl] carbonyl] amino] -1-oxopropyl] amino] -1-methyl-1H-pyrol-2-yl] carbonyl] -1-methyl-1H-pyrol-2-yl] -1-methyl-1H-pyrol-2-yl] carbonyl] -1-methyl-1H-pyrol-2-yl] -1-methyl-1H-pyrol-2-yl] -1-methyl-1H-pyrol-3-yl] -1-methyl-1H-pyr

PAGE 2-A

RN 212454-49-4 HCAPLUS

RN 212434-49-4 HCRFLOS
β-Alaninamide, 2, 3, 4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-2-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-propyl)-[9(SI) (CA INDEX NAME)

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\overset{\circ}{\mathsf{U}}_-}{\mathsf{NH}}-\overset{\overset{\circ}{\mathsf{U}}_-}{\mathsf{NH}}-\overset{\overset{\circ}{\mathsf{NH}}_-}{\mathsf{NH}}-\overset{\mathsf{Me}}{\overset{\circ}{\mathsf{U}}_-}\overset{\mathsf{NH}_-}{\mathsf{NH}}-\overset{\mathsf{NH}_-}{\mathsf{U}}-\overset{\mathsf{NH}_-}-\overset{\mathsf{NH}_-}{\mathsf{U}}-\overset{\mathsf{NH}_-}{\mathsf{U}}-\overset{$$

PAGE 1-C

RN 212454-50-7 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[4-[[5-[[[5-[[[5-[[[5-[[3-[[3-([dimethylamino]propyl]amino]-3-coxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonyl]amino]-1-methyl-1H-yrrol-2-yl]carbonylamino]-1-me

ï

Page 234 of 495

PAGE 1-C

PAGE 2-A

- RN 212454-51-8 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
 (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

__ (CH₂)3_NMe₂

- RN 212454-54-1 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)-pyry]]- (9CI) (CA INDEX NAME)

Page 237 of 495

PAGE 1-C

PAGE 2-A

PAGE 1-A

RN 212454-55-2 HCAPLUS

Н2

CN B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonylβ-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

$$-\operatorname{CH}_2-\operatorname{C$$

PAGE 1-C

RN 212454-60-9 HCAPLUS

CN lH-Imidarole-2-carboxamide, N-[5-[[[4-[[5-[[[5-[[[5-[[[5-[[3-[[3-([dimethylanino]propy]]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]-4-[[3-[[4-[[(3-hydroxy-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl]amino]-1-wethyl-1H-pyrrol-2-yl]carbonyl-1-wethyl-1-

PAGE 1-B

PAGE 2-A

- RN 212454-61-0 HCAPLUS

pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-

yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-

yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[4-

[[(3-hydroxy-1-methyl-1H-pyrrol-2-yl)carbonyl]amino]-1-methyl-1H-pyrrol-2-

yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl- (CA INDEX NAME)

Ме

PAGE 1-C

PAGE 2-A

RN 212454-63-2 HCAPLUS

PAGE 1-B

$$-\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}_{NH}}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}_{NH}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}_{NH}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}}_{NH}}_{NH}}_{NH} -\underbrace{\overset{\circ}{\mathbb{L}_{NH$$

PAGE 1-C

PAGE 2-A

RN 212454-93-8 HCAPLUS

CN β -Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)-provyl-| 9(SI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

PAGE 2-A

- RN 212454-94-9 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

RN 212454-98-3 HCAPLUS

CN β -Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-1-mino-1-methyl-1H-pyrrole-2-carbonyl-1-1-mino-1-methyl-1H-pyrrole-2-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-carbonyl-1-1-mino-1-methyl-1H-pyrrole-1-1-mino-1-methyl-1-me

PAGE 1-C

PAGE 2-A

- RN 212455-00-0 HCAPLUS

PAGE 1-A

PAGE 2-A

CN B-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-midazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

RN 212455-01-1 HCAPLUS

PAGE 1-A

PAGE 2-A

RN 212455-02-2 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-1-(CA INDEX NAME)

Me___

PAGE 2-B

CN

RN 212455-05-5 HCAPLUS

1H-Inidazole-2-carboxamide, N-[5-[[[3-[[3-(dimethylamino)propyl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[3-hydroxy-4[[[4-[[4-[[3-hydroxy-4-[[[4-[[3-hydroxy-4-[[4-[[4-[[3-hydroxy-1-methyl-1Hpyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1oxobutyl]amino]-1-oxopropyl]amino]-1-methyl- (CA INDEX NAME)

PAGE 1-A

PAGE 3-A

PAGE 4-A

- RN 212455-06-6 HCAPLUS

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{N}}{\mathsf{U}}_-\mathsf{NH}-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{N}}{\mathsf{U}}_-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{N}}{\mathsf{U}}_-\mathsf{N}-\overset{\mathsf{N}}-\overset{\mathsf{N}}{\mathsf{U}}_-\mathsf{N}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}-\overset{\mathsf{N}}$$

PAGE 1-C

- RN 212455-07-7 HCAPLUS

- RN 212455-08-8 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-midazole-2-carbonyl-4-amino-1-methyl-1H-midazole-2-carbonyl-4-amino-1-methyl-1H-midazole-2-carbonyl-6-alanyl-4-amino-1-methyl-1H-midazole-2-carbonyl-6-amino-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrole-2-carbonyl-1-methyl-1H-pyrole-2-carbonyl-1-methyl-1H-pyrole-2-carbonyl-1-methyl-1-midazole-1-methyl-1-midazole-1-methyl-1-midazole-1-midazo

PAGE 1-B

$$-\operatorname{CH}_2 - \operatorname{CH}_2 - \overset{\circ}{\operatorname{U}} - \operatorname{NH} - \overset{\circ}{\operatorname{U}} -$$

PAGE 1-C

- RN 212455-09-9 HCAPLUS

PAGE 1-A

PAGE 1-B

PAGE 1-C

- RN 212455-12-4 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-9-lalanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

- RN 212455-13-5 HCAPLUS
- CN β -Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-

2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

$$- c_{H2} - c_{H2} -$$

PAGE 1-C

__ (CH2)3_NMe2

PAGE 2-A

- RN 212455-14-6 HCAPLUS
- CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

RN 212455-15-7 HCAPLUS

CN β-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-aminol-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminol-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonylβ-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{Me}}{\mathsf{U}}_-\mathsf{NH}-\mathsf{CH}_2-\mathsf{CH}_2-\overset{\circ}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf{Me}}{\mathsf{U}}_-\mathsf{NH}-\overset{\mathsf$$

PAGE 1-C

__ (CH2)3_NMe2

PAGE 2-A

RN 212455-23-7 HCAPLUS

PAGE 1-A

PAGE 3-A

PAGE 4-A

- RN 212455-24-8 HCAPLUS
- CN β-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-midazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-9-(CA INDEX NAME)

PAGE 1-A

RN 212455-25-9 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[3-[[3-(dimethylamino)propyl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[[4-[[[3-hydroxy-4-[[4-[[[4-[[[4-[[3-hydroxy-1-methyl-1H-pyrrol-2yl)carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1Hpyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1Hpyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl

PAGE 1-A

RN 212455-27-1 HCAPLUS

CN

1H-Imidazole-2-carboxamide, N-[5-[[3-[[3-(dimethylamino)propyl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[([3-hydroxy-4[[[4-[[4-([[3-hydroxy-4-[[[4-([4-([4-([3-hydroxy-1-methyl-1H-pyrrol-2yl)carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1Hpyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-(CA INDEX NAME)

PAGE 3-A

PAGE 4-A

RN 212455-28-2 HCAPLUS

CN

PAGE 1-B

PAGE 1-C

__ (CH₂)3_NMe₂

PAGE 2-A

- RN 212455-33-9 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylproly1-Balany1-4-amino-1-methyl-1H-midazole-2-carbony1-4-amino-3-hydroxy-1-methylH-pyrrole-2-carbony1-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbony1-4aminobutanoy1-4-amino-1-methyl-1H-pyrrole-2-carbony1-4-amino-1-methyl-1Hpyrrole-2-carbony1-B-alany1-4-amino-1-methyl-1H-imidazole-2-carbony14-amino-1-methyl-1H-pyrrole-2-carbony1-N-[3-(dimethylamino)propy])- (9CI)
 (CA INDEX NAME)

Me NH C (CH2) 3 - NB C NH OH NH CH2 CH2 NH Me NH

- RN 212455-34-0 HCAPLUS
- CN B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-Balanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-4-alanino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- [901) (CA INDEX NAME)

RN 212455-35-1 HCAPLUS

CN B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-Balanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methylH-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

RN 212455-37-3 HCAPLUS

CN [B-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-|B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-dimethyl-1H-pyrole-2-carbonyl-N-[3-dimethyl-1]-pyrole-2-carbonyl-N-[3-dimethyl-

PAGE 1-A

- RN 212455-38-4 HCAPLUS
- CN B-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylproly1-Balany1-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-1H-jmidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

RN 212455-39-5 HCAPLUS

PAGE 1-C

CN B-Alaninamide, 2, 3, 4, 5-tetradehydro-3-hydroxy-1-methylprolyl-Balanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 212455-42-0 HCAPLUS

- yl)carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1H-imidazol-2-
- yl]carbonyl]amino]-1-methyl- (CA INDEX NAME)

PAGE 1-A

- RN 212455-60-2 HCAPLUS
- CN IH-Imidazole-2-carboxamide, N-[2-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]-4-[[3-[[[4-[[[3-hydroxy-1-methyl-1H-pyrrol-2yl)carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1oxopropyl]amino]-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1Hpyrrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1H-pyrrol-2yl]carbonyl]amino]-1-oxopropyl]amino]-1-methyl-(CA INDEX NAME)

PAGE 1-A

- RN 212455-61-3 HCAPLUS

PAGE 1-B

PAGE 1-C

- RN 212455-62-4 HCAPLUS
- N B-Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-Balanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1H-pimidazole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

- RN 212455-67-9 HCAPLUS
- CN β -Alaninamide, 2,3,4,5-tetradehydro-3-hydroxy-1-methylprolyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

- RN 212482-74-1 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1H-pyrrole-2-carbonyl-4c(CA INDEX NAME)

RN 212482-75-2 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-butanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 1-B

$$-\operatorname{CH}_2-\operatorname{CH}_2-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\operatorname{CH}_2-\bigcup_{l=1}^{l}\operatorname{NH}-\operatorname{CH}_2$$

PAGE 1-C

$$-CH_2-C-NH-(CH_2)_3-NMe_2$$

PAGE 2-A

PAGE 3-A

RN 212482-76-3 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 2-B

RN 212482-78-5 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-jurle-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

$$-\operatorname{CH}_2-\operatorname{CH}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{NH}}-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{CH}}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{CH}}_2-\overset{\circ}{\operatorname{U}}_-\operatorname{NH}-\overset{\circ}{\operatorname{$$

PAGE 2-A

PAGE 3-A

RN

212482-79-6 HCAPLUS CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H $imidazole-2-carbonvl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-\beta-alanyl-$ 4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanovl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl- $4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-\beta-alanyl-4-amino-1$ methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

$$-\operatorname{CH}_2-\operatorname{CH}_2-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\bigcup_{l=1}^{l}\operatorname{NH}-\operatorname{CH}_2-\bigcup_{l=1}^{l}\operatorname{NH}-\operatorname{CH}-1-\bigcup_{l=1}^{$$

PAGE 2-A

PAGE 3-A

- RN 212482-80-9 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrnole-2-carbonyl-4-amino-1-methyl-1H-pyrnole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrnole-2-carbonyl-4

PAGE 1-A

PAGE 1-B

PAGE 2-A

- RN 212482-82-1 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-jmidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-amino-1-methyl-lH-pyrrole-2-carbonyl-1-gold (CA INDEX NAME)

PAGE 1-A

- RN 212482-83-2 HCAPLUS
- CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-9-amino-1-methyl-lH-pyrrole-2-carbonyl-9-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

PAGE 3-A

- RN 212482-84-3 HCAPLUS
- CN B-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHimidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-B-alanyl4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1methyl-lH-pyrrole-2-carbonyl-B-alanyl-4-amino-1-methyl-lH-imidazole-2carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-8-alanyl-1-q-methyl-lH-pyrrole-2-carbonyl-N-8-alanyl-N-1-M-pyrrole-2-carbonyl-N-1-8-dimethyl-minolypoyyl-1 (9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 1-D

___ NMe 2

- RN 212482-92-3 HCAPLUS

PAGE 2-A

- RN 212482-93-4 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)]-propyl]- (GCI) (CA INDEX NAME)

- RN 212482-94-5 HCAPLUS
- CN B-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methylH-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1m)propyl]- (9CI)
 (CA INDEX NAME)

PAGE 2-A

PAGE 2-B

- RN 212482-96-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-jpyrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

$$\begin{array}{c} \stackrel{\text{Me}}{\underset{\text{Ne}}{\bigcup}} \stackrel{\text{O}}{\underset{\text{Ne}}{\bigcup}} = \text{NH} - \text{CH}_2 - \text{CH}_2 - \stackrel{\text{I}}{\underset{\text{CH}}{\bigcup}} = \text{CH}_2 - \stackrel{\text{CH}}{\underset{\text{CH}}{\bigcup}} = \text{CH}_2 - \stackrel{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\bigcup}} = \text{CH}_2 - \stackrel{\text{CH}}{\underset{\text{CH}}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}{\underset{\text{CH}}}{\underset{\text{CH}}}{\underset{\text{CH}$$

- RN 212482-97-8 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 212482-98-9 HCAPLUS

CN B-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-ami

PAGE 1-B

PAGE 1-C

PAGE 1-D

__NMe 2

- RN 212483-00-6 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
 (CA INDEX NAME)

PAGE 1-A

- RN 212483-01-7 HCAPLUS

$$-\mathrm{NH} \underbrace{-\overset{\mathrm{OH}}{\overset{\mathrm{II}}{\overset{\mathrm{I}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}}{\overset{\mathrm{II}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}}{\overset{\mathrm{I}}}}}{\overset{\overset{\mathrm{I}}}}}{\overset{\overset{}}$$

PAGE 1-C

PAGE 2-A

- RN 212483-16-4 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-D

- RN 212483-25-5 HCAPLUS
- CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-3-amino-1-methyl-1H-pyrrole-2-carbonyl-3-(amino-1-methyl-1H-pyrrole-2-carbonyl-3-(amino-1-methyl-1H-pyrrole-2-carbonyl-3-(amino-1-methyl-1H-pyrrole-2-carbonyl-3-(amino-1-methyl-1H-pyrole-2-carbonyl-3-(ami

RN 212483-26-6 HCAPLUS

PAGE 1-C

PAGE 2-A

RN 212483-27-7 HCAPLUS

CN β -Alaninamide, 2,3,4,5-tetradehydro-1-methylprolyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-3-hydroxyl-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-midazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-H-imidazole-2-carbonyl-(CA INDEX NAME)

PAGE 1-A

- RN 212483-28-8 HCAPLUS
- CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl- β -alanyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-lH-pyrrole-2-ca

PAGE 1-A

PAGE 2-A

Me__

PAGE 3-A

Me___

PAGE 3-B

PAGE 4-B

RN 212483-29-9 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

RN 212483-31-3 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-jurio-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-pyrrole-2-carbonyl-1-methyl

PAGE 1-C

$$-\mathsf{CH}_2-\mathsf{CH}_2 - \overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}} - \mathsf{NH} - \overset{\overset{\circ}{\mathsf{U}}}{\overset{\circ}{\mathsf{U}}} - \mathsf{NH} - \overset{\mathsf{N}}{\mathsf{U}} - \overset{\mathsf{N}}{\mathsf{U}} - \mathsf{NH} - \mathsf{CH}_2 - \mathsf{CH}_2 - \overset{\circ}{\mathsf{U}} - \mathsf{NH} - \overset{\mathsf{U}}{\mathsf{U}} -$$

PAGE 1-D

- RN 212483-32-4 HCAPLUS
- CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2

$$-\mathrm{NH} - \mathrm{NH} - \mathrm{OH} - \mathrm{O$$

PAGE 1-C

PAGE 2-A

RN 212483-33-5 HCAPLUS

CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-limidazole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-3-danyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-3-danyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

Page 323 of 495

RN 212483-34-6 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 212483-35-7 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-limidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-methyl-lH-pyrrole-2-carbonyl-N-l-3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

PAGE 1-B

Page 325 of 495

PAGE 1-D

PAGE 1-A

__NH__(CH2)3_NMe2

RN 212483-41-5 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-(3-(dimethyl-amino)propyl)- (9CI) (CA INDEX NAME)

Page 326 of 495

RN 212483-42-6 HCAPLUS

DACE 1_A

PAGE 1-B

PAGE 1-C

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1H-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-1-methyl-1-M-13-(dimethyl-amino-

PAGE 2-B

RN 212483-44-8 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (G1) (C2 IMDEX NAME)

Page 330 of 495

PAGE 1-A

PAGE 2-A

.

PAGE 2-B

Page 331 of 495

PAGE 3-A

Me___

PAGE 3-B

PAGE 4-B

N N Me

RN 212483-45-9 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-

 $\label{eq:local_potential} 4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-[3-(dimethyl-1H-pyrrole-2-(dimethyl-4-[3-(dimethyl-4-[3-(dimethyl-4-[3-(dimethyl-4-[3-(dimethyl-4-[3-(dimethyl-4-[3-(dimethyl-4-[$

- RN 212483-46-0 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-p)-royyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

RN 212483-47-1 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 1-B

PAGE 1-C

PAGE 1-D

__ (CH2)3_NMe2

- RN 212483-48-2 HCAPLUS
- CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-limidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-3-limidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-3-(GA INDEX NABE) (CA INDEX NABE)

PAGE 1-A

PAGE 1-B

PAGE 1-C

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lHpyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lHpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 2-A

RN 212483-52-8 HCAPLUS

CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-limidazole-2-carbonyl-4-amino-1-methyl-lH-jyrrole-2-carbonyl-4-amino-1-methyl-lH-jyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-jyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)propyl)-[9C1] (CA INDEX NAME)

PAGE 1-B

$$- \text{NH} \underbrace{ \left(\begin{array}{c} \text{OH} \\ \text{NH} \end{array} \right) \left(\begin{array}{c}$$

PAGE 1-C

PAGE 2-A

RN 212483-53-9 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX
NAME)

.... . .

PAGE 1-B

$$-\underbrace{\underbrace{\underbrace{l}_{-NH-(CH2)}^{N}}_{Me}}_{Me}\underbrace{\underbrace{l}_{-NH-(CH2)}^{N}}_{Me}\underbrace{\underbrace{l}_{-NH-(CH2)}^$$

PAGE 1-C

$$-\overset{\circ}{\mathbb{L}}_{\mathrm{NH-CH}_{2}-\mathrm{CH}_{2}}-\overset{\circ}{\mathbb{L}}_{\mathrm{NH-Me}} \overset{\circ}{\mathbb{L}}_{\mathrm{NH-Me}} \overset{\circ}{\mathbb{L}}_{\mathrm{NH-CH}_{2}-\mathrm{CH}_{2$$

PAGE 1-D

- RN 212483-54-0 HCAPLUS
- CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl)- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

- RN 212483-62-0 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

RN 212483-64-2 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

RN 212483-67-5 HCAPLUS

CN IH-Imidazole-2-carboxamide, N-[5-[[2-[[4-[5-[[5-[[5-[[5-[[5-[[3-[13-(dimethylamino) propyl]amino]-3-oxopropyl]amino] carbonyl]-1-methyl-H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4oxobutyl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]carbonyl]-4hydroxy-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[13-methyl-4-[[3-[(1-methyl-H-imidazol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1H-imidazol-2yl]carbonyl]amino]- (CA INDEX NAME)

PAGE 1-A

- RN 212483-69-7 HCAPLUS

PAGE 1-A

PAGE 2-A

Me__

PAGE 3-B

PAGE 4-B

RN 212483-70-0 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl- β -alanyl-4-amino-

1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-mydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1H-pyrrole-2-c

PAGE 2-A

RN 212483-72-2 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-1-met

PAGE 1-C

PAGE 2-A

RN 212483-74-4 HCAPLUS

CN

PAGE 1-A

PAGE 1-B

PAGE 1-C

RN 212483-77-7 HCAPLUS

CN

PAGE 2-A

RN 212483-80-2 HCAPLUS

- RN 212483-82-4 HCAPLUS

PAGE 1-B

$$- \text{NH} \underbrace{ \begin{array}{c} \overset{\circ}{\mathbb{L}} \\ \text{NH} \end{array}}_{\text{Me}} \underbrace{ \begin{array}{c} \overset{\overset{\circ}{\mathbb{L}} \\ \text{NH} \end{array}}_{\text{MH}} \underbrace{ \begin{array}{c} \overset{\overset{\overset{\circ}{\mathbb{L}} \\ \text{NH}} \end{array}}_{\text{MH}} \underbrace{ \begin{array}{c} \overset{\overset{\overset{\overset{\circ}{\mathbb{L}} \\ \text{NH}}}_{\text{MH}} \underbrace{ \begin{array}{c} \overset{$$

PAGE 2-A

RN 212484-02-1 HCAPLUS

CN [B-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-B-alanyl-4-aminol-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-fimidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-Balanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHpyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-[901] (C3 INDEX NAME)

PAGE 1-A

PAGE 1-B

Page 357 of 495

PAGE 1-D

- RN 212484-03-2 HCAPLUS
- CN B-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-B-alanyl-4-amino1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-0B-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-N-13-(dimethylamino)propyl-1 (9C1) (C3 NDEX NAME)

PAGE 1-A

PAGE 4-B

RN 212484-13-4 HCAPLUS

 $\label{eq:pyrrole-2-carbonyl-$\beta-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)propyl-] (9CI) (CA INDEX NAME)$

RN 212484-15-6 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-4-amino-butanoyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)-propyl)- (9CI) (CA INDEX NAME)

- RN 212484-16-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 2-B

212484-18-9 212484-20-3 212484-21-4 212484-22-5 212484-23-6 212484-24-7 212484-25-8 212484-26-9 212484-27-0 212484-34-9 212484-35-0 212484-36-1 212484-37-2 212484-38-3 212484-41-8 212484-42-9 212484-43-0 212484-44-1 212484-45-2 212484-46-3 212484-51-0 212484-52-1 212484-53-2 212484-55-4 212484-56-5 212484-57-6 212484-58-7 212484-59-8 212484-60-1 212484-61-2 212484-67-8 212484-70-3 212484-90-7 212485-15-9 212485-17-1 212485-20-6 212488-14-7 212488-16-9 212488-18-1 212488-22-7 212488-24-9 212488-26-1 212488-30-7 212488-32-9 212488-34-1 212488-36-3 212488-78-3 212488-81-8 212488-87-4 212488-90-9 212488-93-2 212489-05-9 212489-08-2 212489-53-7 212495-49-3 212496-53-2 212496-59-8 212496-68-9 212496-73-6 212496-78-1 212496-88-3 212496-93-0 212496-98-5 212497-03-5 212497-28-4 212497-82-0

Page 364 of 495

212497-86-4 212497-94-4 212497-97-7 212497-99-9 212498-04-9 212498-06-1

212498-42-5

CN

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression) $\,$

RN 212484-18-9 HCAPLUS

 $\label{eq:continuity} $$\beta$-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)$

PAGE 1-

PAGE 1-B



RN 212484-20-3 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-

NH
CH2
CH2
CH2
NH
CM
O

PAGE 2-A

N Me

PAGE 3-A

- RN 212484-21-4 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

MH CH2 CH2 CH2 WH PAGE 2-A

N Me

PAGE 3-A

RN 212484-22-5 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-proyyl]-(9CI) (CA INDEX NAME)

PAGE 2-A

- RN 212484-23-6 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

PAGE 3-A

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

RN 212484-25-8 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-butanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 1-A

Me Me Me Me Me

NH ME

N

PAGE 2-A

RN 212484-26-9 HCAPLUS

Page 377 of 495

RN 212484-27-0 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1-(0A INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 212484-34-9 HCAPLUS

 $[\]begin{tabular}{ll} \mbox{CN} & β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-$

 $\label{eq:amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)propyl-1 (SCI) (CA INDEX NAME)$

RN 212484-35-0 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-M-[3-(dimethyl-amino)propyl)- (9CI) (CA NNDEX NAME)

PAGE 1-A

PAGE 2-A

- RN 212484-36-1 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9C1) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 212484-37-2 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA
INDEX NAME)

Page 385 of 495

RN 212484-38-3 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

$$\begin{array}{c} - \text{CH}_2 - \text{C} - \text{NH} - \text{(CH}_2) \text{ 3} - \text{NMe}_2 \\ \downarrow \\ \end{array}$$

PAGE 2-A

PAGE 3-A

RN 212484-41-8 HCAPLUS

PAGE 2-A

RN 212484-42-9 HCAPLUS

PAGE 1-C

PAGE 2-A

PAGE 3-A

CN IH-Imidazole-2-carboxamide, N-[5-[[14-[[5-[[15-[[15-[[13-[[2-[[15-[[13-[[2-[dimthyl-amino]propyl] amino]-3-oxopropyl] amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-1-methyl-1H-pyrrol-3-yl]amino]-1-methyl-4-[[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1-methyl-

PAGE 1-B

PAGE 3-A

PAGE 2-A

RN 212484-44-1 HCAPLUS

1H-Imidazole-2-carboxamide, N-[5-[[4-[[5-[[5-[[5-[[3-[[2-[[5-[[3-[[3-[3-[3-[dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1Hpyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-4-[[1]-methyl-4-[[1]-methyl-4-[[1]-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1Hpyrrol-2-yl]carbonyl]amino]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-A

PAGE 3-A

- RN 212484-45-2 HCAPLUS
- CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrro

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 2-A

- RN 212484-46-3 HCAPLUS
- CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-8-alanyl-4-amino-1-methyl-1-lH-pyrrole-2-carbonyl-8-amino-1-methyl-1-lH-pyrrole-2-c

PAGE 2-A

- RN 212484-51-0 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 212484-52-1 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

- RN 212484-53-2 HCAPLUS
- CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-4-amino-1-methyl-1H-pyrole-2-carbonyl-1-(CA INDEX NAME)

- RN 212484-55-4 HCAPLUS
- CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

Page 402 of 495

RN 212484-56-5 HCAPLUS CN 1H-Imidazole-2-carbo

1H-Imidazole-2-carboxamide, N-[5-[[[5-[[[4-[[5-[[[5-[[[5-[[[5-[[[3-[[3-[2-[[5-[[3-[2-[dinethylamino] propyl]amino]-3-oxopropyl]amino]-3-oxopropyl]amino]-3-oxopropyl]amino]-3-oxopropyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-[[[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-[[(Carbonyl)-1-oxopropyl]amino]-(CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 3-A

[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]amino]-3-oxopropyl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-4-hydroxy-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-2-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-2-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1-met

yl]carbonyl]amino]-1-oxopropyl]amino]- (CA INDEX NAME)

PAGE 1-B

$$-\underbrace{\underbrace{\hat{\mathbb{I}}_{-NH-CH_2-CH_2-\hat{\mathbb{I}}_{-NH-CH_2-CH_2-\hat{\mathbb{I}}_{-NH-CH_2$$

$$\begin{array}{c} -\text{CH}_2 - \text{C} - \text{NH} - (\text{CH}_2) \, 3 - \text{NMe}_2 \end{array}$$

PAGE 2-A

PAGE 3-A

RN

212484-58-7 HCAPLUS CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-\(\text{\beta}\)-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2 $carbonyl-\beta-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imidazole-2-amino-1-methyl-1H-imi$ methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

- RN 212484-59-8 HCAPLUS
- CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-jiridazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-NDEX NAME)

PAGE 1-B

PAGE 1-C

PAGE 2-A

PAGE 3-A

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1Hpyrrole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NNME)

12 12 H

RN 212484-61-2 HCAPLUS

CN β -Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4

PAGE 1-B

PAGE 1-C

PAGE 2-A

PAGE 3-A

N N M

- RN 212484-67-8 HCAPLUS
- CN B-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-Balanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-Bpyrrole-2-carbonyl-N-l3-(dimethylamino)propyl)-(9CI) (C3 INDEX NAME)

PAGE 1-B

PAGE 1-C

$$-\overset{\circ}{\mathbb{L}}_{-}\text{NH}-\text{CH}_{2}-\text{CH}_{2}-\overset{\circ}{\mathbb{L}}_{-}\text{NH}-\overset{\circ}{\text{NH}}-\overset{\circ}{\mathbb{L}}_{-}\text{NH}-\overset{\circ}{\text{NH}}-\overset{\circ}{\text{NH}}-\overset{\circ}{\text{CH}}_{2}-\text{CH}_{2}-\overset{\circ}{\text{C}}-\overset{\circ}{\text{NH}}-\overset{\circ}{\text{CH}}_{2}-\overset{\circ}{\text{CH}}_{2}-\overset{\circ}{\text{CH}}_{2}-\overset{\circ}{\text{CH}}-\overset{\circ}{\text$$

PAGE 1-D

__NH_ (CH2)3_NMe2

RN 212484-70-3 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrole-2-carbonyl-4-amino-1-me

pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

$$\begin{array}{c} - \operatorname{CH}_2 - \operatorname{CH}_2 - \operatorname{C}_- \operatorname{NH}_- (\operatorname{CH}_2) \operatorname{3}_- \operatorname{NMe}_2 \\ & \vdots \\$$

PAGE 2-A

RN 212484-90-7 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9C1) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

HH C= 0 CH2 CH2 NH C= 0

RN 212485-15-9 HCAPLUS

CN β -Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-1-H-pyrrole-2-carbonyl- β -alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

Page 419 of 495

RN 212485-17-1 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1mino)propyl]- (9CI) (CA INDEX
NNME)

PAGE 1-B

$$-\operatorname{CH}_2-\operatorname{CH}_2=\bigcup_{i=1}^{n}\operatorname{NH}-\bigcup_{i=1}^{n}\operatorname{NH}-\bigcup_{i=1}^{n}\operatorname{NH}-\bigcup_{i=1}^{n}\operatorname{NH}-\operatorname{CH}_2$$

PAGE 2-A

PAGE 3-A

- RN 212485-20-6 HCAPLUS CN β-Alaninamide, 1-met)
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-l-imidazole2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-Carbonyl-4-methyl-1Hpyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 3-A

- RN 212488-14-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-propyl]- (9C1) (CA INDEX NAME)

PAGE 1-B

$$\begin{array}{c} -\text{CH}_2 - \text{C} - \text{NH} - (\text{CH}_2) \text{ 3} - \text{NMe}_2 \\ \downarrow \\ \end{array}$$

PAGE 2-A

PAGE 3-A

212488-16-9 HCAPLUS

RN

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl)-[071] (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 3-A

RN 212488-18-1 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9C1) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

- RN 212488-22-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-(CA INDEX NAME)

PAGE 1-B

PAGE 1-C

PAGE 2-A

PAGE 3-A

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9C1) (CA INDEX NAME)

- RN 212488-26-1 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-aminobutanoyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

- RN 212488-30-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

$$-\mathsf{CH}_2-\mathsf{CH}_2 = \bigcup_{\mathsf{M}}^{\mathsf{N}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{N}_{\mathsf{M}}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}_{\mathsf{M}}} \mathsf{NH} = \bigcup_{\mathsf{M}_{\mathsf{M}}}^{\mathsf{M}$$

PAGE 1-C

PAGE 2-A

PAGE 3-A

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1H-pyrrole-2-carbonyl-4C(Σ INDEX NAME)

- N Me
- RN 212488-34-1 HCAPLUS

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 1-D

___ NMe 2

- RN 212488-36-3 HCAPLUS

$$\begin{array}{c} -\text{CH}_2 - \text{C} - \text{NH} - (\text{CH}_2) \text{ } 3 - \text{NMe}_2 \end{array}$$



- RN 212488-78-3 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-propyl]-(9CI) (CA INDEX NAME)

RN 212488-81-8 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethyl-amino)-propyl)-(9CI) (CA INDEX NAME)

PAGE 1-B
$$-\text{NH} - \bigcup_{\text{Ne}}^{\text{OH}} \text{NH} - \text{CH}_2 - \text{CH}_2 - \bigcup_{\text{L}}^{\text{U}} \text{NH} - \bigcup_{\text{Ne}}^{\text{NH}} \text{NH} - \bigcup_{\text{Me}}^{\text{U}} \text{NH} - \bigcup_{\text{Me}}^{\text{NH}} \text{NH} - \bigcup_{\text{NH}}^{\text{NH}} - \bigcup_{\text{NH}}^{\text{NH}} \text{NH} - \bigcup_{\text{NH}}^{\text{NH}} \text{NH} - \bigcup_{\text{NH}}^{\text{NH}} - \bigcup_{\text{NH}}^{\text{NH$$

- RN 212488-87-4 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9C)) (CA INDEX NAME)

PAGE 1-B

$$-\mathrm{NH} - \bigcup_{\mathrm{II}} \mathrm{NH} - \mathrm{CH}_2 - \mathrm{CH}_2 - \bigcup_{\mathrm{II}} \mathrm{NH} -$$

PAGE 1-C

- RN 212488-90-9 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-propyl]- (9C1) (CA INDEX NAME)

PAGE 1-C

RN 212488-93-2 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-B
$$-NH - \bigcup_{He}^{OH} NH - CH_2 - CH_2 - \bigcup_{He}^{OH} NH - \bigcup_{He}^{OH} NH - \bigcup_{He}^{OH} NH - \bigcup_{He}^{OH} NH$$

PAGE 1-C

- RN 212489-05-9 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1Himidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
 (CA INDEX NAME)

$$-\mathrm{NH} \underbrace{\bigcup_{\mathrm{Ne}}^{\mathrm{OH}}}_{\mathrm{Ne}} \mathrm{NH} - \mathrm{CH}_2 - \mathrm{CH}_2 - \underbrace{\bigcup_{\mathrm{NH}}^{\mathrm{NH}}}_{\mathrm{Ne}} \mathrm{NH} - \underbrace{\bigcup_{\mathrm{Ne}}^{\mathrm{NH}}}_{\mathrm{Ne}} \mathrm{NH}$$

PAGE 1-C

RN 212489-08-2 HCAPLUS

CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

Page 449 of 495

PAGE 1-C

- RN 212489-53-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lHpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2carbonyl-4-aminobutanoyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-β-alanyl-4-amino-1methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX
 NNME)

PAGE 1-B

RN 212495-49-3 HCAPLUS

CN

PAGE 1-A

PAGE 2-B

PAGE 3-A

Me__

PAGE 3-B

PAGE 4-B

- RN 212496-53-2 HCAPLUS

RN 212496-59-8 HCAPLUS

CN

IH-Imidazole-2-carboxamide, N-[5-[[[5-[[[3-[[3-(dimethyl-almiop)propyl]amino]-a-oxopropyl]amino] carbonyl]-1-methyl-1H-pyrrol-3-yl]amino] carbonyl]-1-methyl-1H-pyrrol-3-yl]-amino] carbonyl]-1-methyl-1H-pyrrol-3-yl]-amino] carbonyl]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-midazol-2-yl)carbonyl]amino]-1-oxopropyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1-o

- RN 212496-68-9 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-mino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-mino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-mino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 3-C

RN 212496-73-6 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-

pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[[3-[[1]-hydroxy-4-[[4-[[4-[1]-hydroxy-4-[[4-[4-[1]-hydroxy]-methyl-4-[(1]-methyl-1H-inidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-coxporpyl]amino]-1-methyl-1CA INDEX NAME)

PAGE 3-A

RN 212496-78-1 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-βalanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (9C1) (CA INDEX NAME)

PAGE 1-B

PAGE 3-A

- RN 212496-88-3 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-βalanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1H-pyrrole-2-carbonyl-4CCA INDEX NAMES

HO Me

PAGE 2-C

N_Me

PAGE 3-C

- RN 212496-93-0 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-1H-pyrrole-2-carbonyl-1-(CA INDEX NAME)

RN 212496-98-5 HCAPLUS

CN

 $\label{eq:continuity} \beta-\text{Alaninamide, } 1-\text{methyl-1H-imidazole-}2-\text{carbonyl-}4-\text{amino-}3-\text{hydroxy-}1-\\ \text{methyl-1H-pyrrole-}2-\text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\text{carbonyl-}\beta-\\ \text{alanyl-}4-\text{amino-}1-\text{methyl-1H-imidazole-}2-\text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}4-\text{amino-}1-\text{methyl-1H-pyrrole-}2-\\ \text{carbonyl-}N-[3-(\text{dimethylamino})\text{propyl]-} (9CI) (CA INDEX NAME)$

PAGE 1-A

- RN 212497-03-5 HCAPLUS

PAGE 1-B

PAGE 1-C

Me____

PAGE 1-D

RN 212497-28-4 HCAPLUS

PAGE 1-A

Page 468 of 495

RN 212497-82-0 HCAPLUS

PAGE 1-A

Me NH CH2 3-NH HO NH HO

RN 212497-86-4 HCAPLUS

PAGE 1-A

RN 212497-94-4 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 1-A

- RN 212497-97-7 HCAPLUS
- CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-propyl)-(9CT) (CA INDEX NAME)

RN 212497-99-9 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-H-[3(dimethylamino)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

RN 212498-04-9 HCAPLUS

R-Alaninamide, 1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-lH-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-lH-imidazole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-4-amino-1-methyl-lH-pyrrole-2-carbonyl-1-M-pyrrole-2-carbonyl-yl-lH-pyrrole-2-carbonyl-yl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino-1-methyl-lH-pyrrole-2-carbonyl-N-[3-(dimethyl-amino)-propyl)-[9CI) (CA INDEX NAME)

PAGE 1-C

PAGE 2-A

- RN 212498-06-1 HCAPLUS

PAGE 1-A

Page 477 of 495

RN 212498-42-5 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-3-hydroxy-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-imidazole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]-(9CI)

PAGE 1-B

PAGE 1-C

PAGE 2-A

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:568743 HCAPLUS Full-text
DOCUMENT NUMBER: 129:184244

ORIGINAL REFERENCE NO.: 129:37273a,37276a

TITLE: Inhibition of viral or cancer gene transcription by

polyamide DNA-binding ligands Gottesfeld, Joel M.; Dervan, Peter B.; Mosier, Donald INVENTOR(S):

E.; Baird, Eldon E.

PATENT ASSIGNEE(S): California Institute of Technology, USA; The Scripps

Research Institute PCT Int. Appl., 113 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: 13

PATENT INFORMATION:

| | PATENT NO. | | | | | | KIND DATE | | | APPL | | | | | | | | |
|--------|------------|------|------|------|-------------|-----|-----------|------|-----------------|------|------|------|-----|-----|------------|------|--------|--|
| WO | iO 9835702 | | | | A1 19980820 | | | | | | | | | | | 9980 | 211 <- | |
| | W: | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, | |
| | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | GM, | GW, | HU, | ID, | IL, | IS, | JP, | KE, | KG, | |
| | | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | |
| | | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | |
| | | UA, | UG, | US, | UZ, | VN, | YU, | ZW | | | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | DE, | DK, | ES, | FI, | |
| | | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | |
| | | GA, | GN, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | | | |
| WO | 9850 | 582 | | | A1 | | 1998 | 1112 | WO 1997-US12722 | | | | | | 19970721 < | | | |
| | W: | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, | |
| | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | HU, | IL, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | |
| | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, | |
| | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | UA, | UG, | UZ, | |
| | | VN, | YU, | ZW | | | | | | | | | | | | | | |
| | RW: | GH, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, | |
| | | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | |
| | | GN, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | | | | |
| CA | 2280 | 806 | | | A1 | | 1998 | | | | | | | | | | 211 <- | |
| AU | 9861 | | | | | | | | AU 1998-61517 | | | | | | 19980211 < | | | |
| AU | 7499 | 53 | | | B2 | | 2002 | 0704 | | | | | | | | | | |
| EP | 9647 | 03 | | | A1 | | 1999 | 1222 | | EP 1 | 998- | 9062 | 40 | | 1 | 9980 | 211 <- | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | |
| | | IE, | | | | | | | | | | | | | | | | |
| JP | 2002 | 5150 | 57 | | T | | 2002 | 0521 | | JP 1 | 998- | 5358 | 45 | | 1 | 9980 | 211 <- | |
| US | 6660 | 255 | | | B1 | | 2003 | 1209 | | US 2 | 000- | 3675 | 13 | | 2 | 0000 | 425 <- | |
| RIORIT | Y APP | LN. | INFO | . : | | | | | | US 1 | 997- | 3838 | 4P | | P 1 | 9970 | 214 <- | |
| | | | | | | | | | | US 1 | 997- | 3839 | 4P | | P 1 | 9970 | 214 <- | |
| | | | | | | | | | | US 1 | 997- | 8530 | 22 | | A2 1 | 9970 | 421 <- | |
| | | | | | | | | | | WO 1 | 997- | US12 | 722 | | A2 1 | 9970 | 721 <- | |
| | | | | | | | | | | US 1 | | | | | A 1 | 9970 | 508 <- | |
| | | | | | | | | | | US 1 | 997- | 8535 | 25 | | | | 508 <- | |
| | | | | | | | | | | | | | | | | | 902 <- | |
| | | | | | | | | | | US 1 | 997- | 5833 | 8P | | P 1 | 9970 | 910 <- | |
| | | | | | | | | | | WO 1 | 998- | US24 | 44 | | W 1 | 9980 | 211 <- | |
| D En | tered | STN | : 0 | 7 Se | p 19 | 98 | | | | | | | | | | | | |

- AB The invention provides polyamides suitable for modulating cellular or viral gene expression by binding to an identified target DNA sequence adjacent to the binding site of a minor groove transcription factor protein. The polyamides of the present invention are useful for the treatment of a human infected with a virus such as HIV-1. The polyamides of the present invention are also useful for the treatment of conditions, such as cancers, that result from the expression or over-expression of cellular genes, particularly oncogenes.
- IT 211860-89-8 211860-90-1

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)

RN 211860-89-8 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3(dimethylamino)propyl]- (GCI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

RN 211860-90-1 HCAPLUS

CN β-Alaninamide, 1-methyl-1H-imidazole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl1H-pyrrole-2-carbonyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4aminobutanoyl-4-amino-1-methyl-1H-pyrrole-2-carbonyl-4-amino-1-methyl-1Hpyrrole-2-carbonyl-β-alanyl-4-amino-1-methyl-1H-imidazole-2-carbonyl4-amino-1-methyl-1H-pyrrole-2-carbonyl-N-[3-(dimethylamino)propyl]- (9CI)
(CA INDEX NAME)

PAGE 1-B

$$-\underbrace{\overset{\circ}{\mathbb{L}}_{\mathrm{NH}}}_{\mathrm{Me}}\underbrace{\overset{\circ}{\mathbb{L}}_{\mathrm{NH}-\mathrm{CH}_{2}-\mathrm{CH}_{2}-\overset{\circ}{\mathbb{L}}_{\mathrm{NH}}}_{\mathrm{NH}-\mathrm{CH}_{2}-\mathrm{CH}_{2}-\overset{\circ}{\mathbb{L}}_{\mathrm{NH}}}_{\mathrm{NH}}$$

PAGE 1-C

PAGE 2-A

PAGE 3-A

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1996:386564 HCAPLUS Full-text

DOCUMENT NUMBER: 125:108335

ORIGINAL REFERENCE NO.: 125:20155a

TITLE: Extended hairpin polyamide motif for sequence-specific

recognition in the minor groove of DNA AUTHOR(S): Trauger, John W.; Baird, Eldon E.; Dervan, Peter B.

Arnold and Mabel Beckman Lab. Chem. Synthesis, CORPORATE SOURCE: California Inst. Technol., Pasadena, CA, 91125, USA

SOURCE: Chemistry & Biology (1996), 3(5), 369-377

CODEN: CBOLE2; ISSN: 1074-5521

PUBLISHER: Current Biology

DOCUMENT TYPE: Journal LANGUAGE: English

Entered STN: 04 Jul 1996

AB Three-ring polyamides containing N-methylimidazole and N-methylpyrrole amino acids bind sequence-specifically to double-helical DNA by forming side-by-side complexes in the minor groove. Simple pairing rules relate the amino-acid sequence of a pyrrole-imidazole polyamide to its expected DNA target site, and polyamides that target a wide variety of DNA sequences have been synthesized. We have shown previously that two three-ring subunits could be linked together by an aliphatic amino acid, increasing the binding affinity of the polyamide and, in some cases, increasing the length of the target sequence. We set out to determine whether different types of linkers could be used in a single mol. to generate a nine-ring polyamide mol. that would bind to specific DNA sequences. A nine-ring pyrrole-imidazole polyamide, containing two different amino acid linkers, β -alanine and γ -aminobutyric acid, has been synthesized and shown to specifically bind a designated nine-base-pair target site at subnanomolar concentration in a novel extended hairpin conformation. The amino acids y-aminobutyric acid and \(\beta\)-alanine optimally link three-ring pyrrole-imidazole subunits in 'hairpin' and 'extended' conformations, resp. Both aliphatic amino acids can be combined to generate a nine-ring polyamide that specifically recognizes a nine-base-pair target site with very high affinity.

179259-18-8P 179259-19-9P

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(extended hairpin polyamide motif for sequence-specific recognition in

the minor groove of DNA)

179259-18-8 HCAPLUS

RN

CN

PAGE 1-B

PAGE 2-A

RN 179259-19-9 HCAPLUS

CN lH-Imidazole-2-carboxamide, N-[5-[[5-[[3-[[2-[[5-[[3-[[3-[[3-[aminopropy]) methylamino]propyl] amino]-2-oxoethyl] amino] carbonyl]-1-methyl-lH-pyrrol-3-yl] amino] carbonyl]-1-methyl-lH-imidazol-4-yl] amino]-3-oxopropyl] amino] carbonyl]-1-methyl-lH-pyrrol-3-yl] amino] carbonyl]-1-methyl-1-lH-pyrrol-3-yl]-1-methyl-4-[[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[[1-methyl-4-[1-me

PAGE 1-B

PAGE 2-A

L29 ANSWER 13 OF 16 WPIX COPYRIGHT 2009

THOMSON REUTERS on STN

DUPLICATE 1 ACCESSION NUMBER:

TITLE:

2009-J22672 [35] WPIX

New pyrrolobenzodiazepine derivative useful for in medical treatment or for treating a disease or condition

ameliorated by the down-regulation of the androgen

receptor e.g. prostate cancer

DERWENT CLASS: B02

INVENTOR: HOWARD P; MASTERSON L; ROFFEY J

PATENT ASSIGNEE: (SPIR-N) SPIROGEN LTD

COUNTRY COUNT: 122

PATENT INFO ABBR.:

| PATENT NO | KIND | DATE | WEEK | LA | PG | MAIN | IPC |
|------------|---------|----------|-----------|----|--------|------|-----|
| | | | | | | | |
| WO 2009060 | 0208 A1 | 20090514 | (200935)* | EN | 118[4] | | |

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE WO 2009060208 A1 WO 2008-GB3757 20081107 PRIORITY APPLN. INFO: GB 2007-22088 WO 2009060208 A1 UPAB: 20090604 NOVELTY - Pyrrolobenzodiazepine (PBD) derivative is new. DETAILED DESCRIPTION - Pyrrolobenzodiazepine (PBD) derivative of formula (I) is new. a'=optional presence of a double bond; R2=-H, -OH, =O, =CH2, -CN, -R, OR, halo, =CH-R, O-SO2-R, CO2R or COR; R7=H, R, OH, OR, SH, SR, NH2, NHR, NRR', nitro, Me3Sn or halo; R,R'=1-7C alkyl, 3-20C heterocyclyl and 5-20C aryl (all optionally substituted); R10.R11=H or Y1Rv; or R10+R11=double bond; Y1=O, S or NH; Ry=H or 1-7C alkyl; or H and SOxM1; x=2 or 3: M1=monovalent cation; X=5-6C heteroarylene; n=1-6C. An INDEPENDENT CLAIM is included for an precursor pyrrolobenzodiazepine compound of formula (II). R10a=nitrogen protecting group; R11a=OH or OProt': Pro'=hydroxy protecting group. ACTIVITY - Cytostatic. MECHANISM OF ACTION - Androgen receptor (AR) blocker; AR mRNA transcription inhibitor. Efficacy of test compound for selective inhibition of AR mRNA transcription was carried out using RNA extraction and quantitation and cDNA generation assay in LNCaP-FGC prostate carcinoma cells, seeded into six-well plates in which the test compound was added at 1 mu M and incubated for 24 hours. The results showed that the expression on AR was only 0.0008fold. USE - In medical treatment; in the manufacture of a medicament for treating a disease or condition ameliorated by the down-regulation of the Androgen Receptor selected from prostate cancer (all claimed). AN.S DCR-2045657 SDCN RB2E20 * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * AN.S DCR-2045669 SDCN RB2E32 * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * 'HITSTR' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages

or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT): IBIB AB OHIT

L29 ANSWER 14 OF 16 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 149:549619 MARPAT Full-text

TITLE: DNA-binding polyamides, targeting steroid response

elements and disrupting gene regulation, and therapeutic uses for treating human diseases

Dervan, Peter B.; Nickols, Nicholas G. INVENTOR(S): PATENT ASSIGNEE(S): California Institute of Technology, USA

SOURCE: PCT Int. Appl., 88pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | | | | | KIND DATE | | | | Al | PPLI | CATI | ON NO | DATE | | | | | |
|------|---------------|-------|------------|-----------|-------|-----------|------|----------------|------|------|------|------|-------|----------|------|------|------|-----|------|
| | WO 2008133877 | | | A1 200811 | | | 1106 | WO 2008-US5184 | | | | | | 20080422 | | | | | |
| | | W: | W: AE, AG, | | AL, | AM, | AO, | AT, | AU, | AZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | BZ, | |
| | | | CA, | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DO, | DZ, | EC, | EE, | EG, | ES, | |
| | | | FI, | GB, | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | |
| | | | KG, | KM, | KN, | KΡ, | KR, | ΚZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | |
| | | | ME, | MG, | MK, | MN, | MW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | |
| | | | PL, | PT, | RO, | RS, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | TJ, | TM, | |
| | | | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | |
| | | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HR, | HU, | |
| | | | IE, | IS, | IT, | LT, | LU, | LV, | MC, | MT, | NL, | NO, | PL, | PT, | RO, | SE, | SI, | SK, | |
| | | | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | |
| | | | TG, | BW, | GH, | GM, | KE, | LS, | MW, | ΜZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | |
| | | | AM, | ΑZ, | BY, | KG, | KΖ, | MD, | RU, | ΤJ, | TM | | | | | | | | |
| | US | 2009 | 0042 | 965 | A | 1 | 2009 | 0212 | | U | S 20 | 08-1 | 4894 | 3 | 2008 | 0422 | | | |
| PRIO | RITY | APP | LN. | INFO | . : | | | | | U | S 20 | 07-9 | 2608 | 0P | 2007 | 0423 | | | |
| AB | Th | e pre | esent | inv | renti | lon 1 | elat | es t | o po | lyan | ide | comp | ns. | (I; | X = | CH, | N, C | OH; | each |

pyrrole may be replaced with β -alanine; R2 = H, C1-10-alkvl, C1-10-alkenvl, C1-10-alkynyl, etc.; R3 may be linked to R4 and R1 may be linked to R5 by NHCH2CH(R7)CH(R8)CO, NH CH(R9)CO, NHCH2CH2CO; (R1-4 are further specified); R7-9 = H, NH2, NHCOCH3, etc.; p = 0, 1) capable of inhibiting gene regulation modulated by androgen, glucocorticoid and estrogen response elements in a cell. Polyamides of the invention are capable of entering a cell, binding to ARE, GRE and ERE in the genome, and inhibiting binding of other mols. to these elements. The invention also relates to methods to treat diseases related to ARE-, GRE- and ERE-mediated gene regulation.

MSTR 1A

G1 = 836

= CH G5 G7 = NH

G42 = alkylene <containing 1 or more C> (opt. substd.)

Patent location: claim 1 Note:

additional derivatization also claimed substitution is restricted Note:

MSTR 1B

= 914 G1

$$\begin{array}{c} G_{1} = G_{1}$$

7938-1940



G42 = alkylene <containing 1 or more C> (opt. substd.)

Patent location: claim 1

Note: additional derivatization also claimed

Note: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 15 OF 16 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 139:276894 MARPAT Full-text

ACCESSION NUMBER: 139:276894 MARPAT Full-text
TITLE: Preparation of hairpin-type pyrrole-imidazole

polyamides as anticancer agents

INVENTOR(S): Sugiyama, Hiroshi; Bando, Toshikazu; Saito, Isao
PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

LANGUAGE: Japane FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | TENT | KI | ND. | DATE | | | Al | PPLI | CATI | ο. | DATE | | | | | | |
|---------|-----------------------|------|------|------|-----|------|------|------|------|------|-------|------|----------|------|------|-----|-----|
| | | | | | | | | | - | | | | | | | | |
| WO | 0 2003076412 W: US | | | A | 1 | 2003 | 0918 | | W | 20 | 03-JI | P242 | 20030303 | | | | |
| | | | | | | | | | | | | | | | | | |
| | RW: | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, |
| | | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR | | | | | | |
| JP | 2003 | 2615 | 41 | A | | 2003 | 0919 | | J | P 20 | 02-6 | 3608 | | 2002 | 0308 | | |
| JP | 3898532 | | | B: | 2 | 2007 | 0328 | | | | | | | | | | |
| EP | 1491 | 534 | | A | 1 | 2004 | 1229 | | E | P 20 | 03-7 | 0719 | 2 | 2003 | 0303 | | |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | FI, | RO, | CY, | TR, | BG, | CZ, | EE, | HU, | SK | | | | | |
| US | 2005 | 0176 | 647 | A | 1 | 2005 | 0811 | | U | S 20 | 04-5 | 0700 | 4 | 2004 | 0908 | | |
| US | 7456 | 294 | | B. | 2 | 2008 | 1125 | | | | | | | | | | |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | J | P 20 | 02-6 | 3608 | | 2002 | 0308 | | |
| | | | | | | | | | W | 20 | 03-JI | P242 | 3 | 2003 | 0303 | | |

AB It is intended to provide a pyrrole-imidazole polyamide type functional mol. having enhanced abilities of alkylating DNA and recognizing a sequence, compared with the existing functional mols. of this type, for a specific base sequence occurring on DNA. Hairpin polyamides have an alkylation site via a vinyl linker at the end of a pyrrole-imidazole polyamide and are represented by general formula (I; Rl = a site for alkylation reaction; R2 = H, alkyl, acetamido; p, pl, q, m, n = an integer). Disclosed are drugs for inhibiting the expression of a specific gene and anticancer agents containing the above hairpin polyamide. For example, I (m = p = pl = 1, n = 2, q = 3, Rl = q) selectively alkylated A of the GTCA sequence of DNA (pUC-I'). The compds. I were tested for inhibiting the proliferation of various cancer cells.

MSTR 1

$$G2 = (1-10) \text{ CH2}$$

 $G3 = (1-5) 48-68 35-58$

$$G4 = (1-5) 54-51 43-67$$

$$G5 = (1-5) 50-51 5-69$$

INVENTOR(S):

Patent location: claim 2

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 16 OF 16 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 137:353318 MARPAT Full-text

TITLE: Preparation of distamycin- and netropsin-related

halothienyl compounds as antibiotics and DNA binders Ge, Yigong; Taylor, Matthew J.; Baird, Eldon E.; Burli, Roland W.; Kaizerman, Jacob A.; Martin, Amanda E.; Cadman, Brie

PATENT ASSIGNEE(S): Genesoft, Inc., USA
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | | | | | KIND DATE | | | | Al | PPLI | CATI | и ис | ο. | DATE | | | | |
|-------|------------|------------|------|------|-----|-------------|----------|------|----------------|-----|------|------|------|----------|----------|------|-----|-----|--|
| | wo | 2002088119 | | | A | 1 | 20021107 | | | W | D 20 | 02-U | S131 | 99 | 20020424 | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW | | | | | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | CH, | |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | |
| | ΑU | 2002 | 2547 | 33 | A. | 1 | 2002 | 1111 | | A | J 20 | 02-2 | 5473 | 3 | 20020424 | | | | |
| | US | 2003 | 0130 | 198 | A. | A1 20030710 | | | | U | S 20 | 02-1 | 3288 | 7 | 20020424 | | | | |
| | US | 7122 | 626 | | B. | 2 | 20061017 | | | | | | | | | | | | |
| | US | 2006 | 0287 | 247 | A. | 1 | 2006 | 1221 | | U | S 20 | 06-4 | 4659 | 8 | 20060602 | | | | |
| | US | 7498 | 405 | | B. | 2 | 2009 | 0303 | | | | | | | | | | | |
| PRIOR | IT | APP: | LN. | INFO | . : | | | | | U | S 20 | 01-2 | 8645 | 4P | 20010426 | | | | |
| | | | | | | | | | US 2002-132887 | | | | | 20020424 | | | | | |
| | | | | | | | | | | W | 20 | 02-U | S131 | 99 | 2002 | 0424 | | | |

AB Halogen-substituted thienyl compds. Th-DI-Ym-BSR2Op [Th = halo-substituted 2or 3-thienyl which may also have substituents OH, NO2, (un)substituted (hetero)alkyl; DI = a bond, (un)substituted alkylene, SO, SO2; Y = NH-LC(:B1), where L is an unsatd., 5-membered heterocycle (the heteroatom may be
O, S, or N), NHCH2(CHR15)n (n = 0 or 1, R15 = H, OH, NH2, or F), or a divalent moiety separating NH and C:B1 by 3 or 4 atoms and B1 = O, S, or NH; m = 2-25;
BSR2Op = OB2O or NB2O2, where B2O = H, (un)substituted (hetero)alkyl) were prepared as potential nucleic acid (especially double stranded DNA) binders and as antibiotics. Thus, 3-chloro-2-thienoyl polyamide I was prepared via step-wise couplings and showed MIC ≤ 4 µg/mL for inhibition of S. Aureus, E. Faecalis, B. cereus, and S. Fneumoniae. A number of compds. Of the invention were screened for their ability to bind to three DNA sites (binding data tabulated).

MSTR 1B

$$G3$$
 = bond
 $G7$ = (4-5) 10-2 12-4

Patent location: Note: Note: Note:

claim 1

and pharmaceutically acceptable acid addition salts substitution is restricted additional G7 repeating units also claimed

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Search History

```
1 SEA SPE=ON ABB=ON PLU=ON US2006-570159/APPS
   FILE 'REGISTRY' ENTERED AT 14:27:51 ON 06 JUL 2009
L2
            11 SEA SPE=ON ABB=ON PLU=ON (153348-04-0/BI OR 27072-45-3/BI
              OR 847860-70-2/BI OR 847891-90-1/BI OR 847891-91-2/BI OR
               847895-32-3/BI OR 847895-33-4/BI OR 847895-34-5/BI OR 847895-35
               -6/BI OR 847895-36-7/BI OR 847895-37-8/BI)
   FILE 'REGISTRY' ENTERED AT 14:36:08 ON 06 JUL 2009
L3
              STRUCTURE UPLOADED
L4
              STRUCTURE UPLOADED
L5
            0 SEA SSS SAM L4
L6
            0 SEA SSS FUL L4
L7
             STRUCTURE UPLOADED
L8
           19 SEA SSS SAM L7
L9
            0 SEA SPE=ON ABB=ON PLU=ON L8 AND L2
L10
          335 SEA SSS FUL L7
L11
            1 SEA SPE=ON ABB=ON PLU=ON L10 AND L2
   FILE 'HCAPLUS' ENTERED AT 14:43:34 ON 06 JUL 2009
           22 SEA SPE=ON ABB=ON PLU=ON L10
L13
            13 SEA SPE=ON ABB=ON PLU=ON L12 AND (PRY<=2004 OR AY<=2004 OR
             PD<=2004 OR PY<=2004)
L14
         1632 SEA SPE=ON ABB=ON PLU=ON FUKUDA N?/AU
T-15
          83 SEA SPE=ON ABB=ON PLU=ON KISHIOKA H?/AU
L16
          3217 SEA SPE=ON ABB=ON PLU=ON SUGIYAMA H?/AU
             1 SEA SPE=ON ABB=ON PLU=ON (L14 OR L15 OR L16) AND L13
L17
   FILE 'WPIX' ENTERED AT 14:46:08 ON 06 JUL 2009
L18
            1 SEA SSS SAM L7
L19
            6 SEA SSS FUL L7
L20
            4 SEA SPE=ON ABB=ON PLU=ON L19/DCR
L21
            3 SEA SPE=ON ABB=ON PLU=ON (L14 OR L15 OR L16) AND L20
    FILE 'BEILSTEIN' ENTERED AT 14:47:05 ON 06 JUL 2009
L22
     0 SEA SPE=ON ABB=ON PLU=ON L10
L23
            O SEA SPE=ON ABB=ON PLU=ON L10
    FILE 'MARPAT' ENTERED AT 14:47:21 ON 06 JUL 2009
          0 SEA SSS SAM L7
T.24
L25
            4 SEA SSS FUL L7
   FILE 'HCAPLUS, WPIX' ENTERED AT 14:51:55 ON 06 JUL 2009
L26
            3 DUP REM L17 L21 (1 DUPLICATE REMOVED)
    FILE 'HCAPLUS' ENTERED AT 14:54:04 ON 06 JUL 2009
1.27
            12 SEA SPE=ON ABB=ON PLU=ON L13 NOT L17
    FILE 'WPIX' ENTERED AT 14:55:00 ON 06 JUL 2009
            1 SEA SPE=ON ABB=ON PLU=ON L20 NOT L21
   FILE 'HCAPLUS, WPIX, MARPAT' ENTERED AT 14:55:43 ON 06 JUL 2009
```

16 DUP REM L27 L28 L25 (1 DUPLICATE REMOVED)

L29